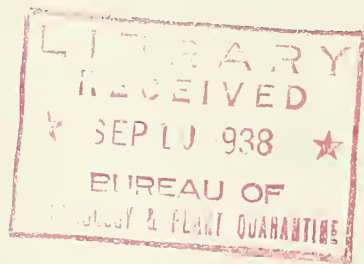


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BUREAU OF
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AGENCIES COOPERATING

THE MORE IMPORTANT RECORDS FOR AUGUST

The grasshopper situation remained unchanged during August. Severe damage was done in a number of places in the Plains States, and heavy migrations into the Red River Valley of North Dakota may lead to trouble in that region next years.

Heavy damage to sod and pastures by white grubs was reported from northern New England and New York. These insects are reported from Virginia and Tennessee attacking strawberries.

The Japanese beetle was excessively abundant at a number of points in the regions that had become infested within the last few years.

The Asiatic garden beetle attracted considerable attention in the vicinity of the District of Columbia.

An introduced weevil, Calomycterus setarius Roelofs, was reported for the first time from Massachusetts during the month. It has also been found in the vicinity of Philadelphia.

Serious armyworm damage was reported from New England, the Middle Atlantic States, southward to Virginia, and also from Minnesota, Oklahoma, and Texas.

The fall armyworm became troublesome in the corn cannery sections of Maine, and a heavy infestation of this insect occurred in Maryland in the vicinity of Washington, D. C., where it was damaging corn. Similar reports of damage to corn were received from Virginia, North Carolina, Georgia, and the Gulf region, with scattered infestations reported from Indiana southward through Missouri and Kansas to Texas.

The corn ear worm is more generally distributed in Maine than it has been for many years. Otherwise this insect is about normally abundant throughout the greater part of the country, although rather heavy outbreaks on both corn and cotton are reported from the Gulf region.

Serious damage by second-brood European corn borer is expected in Massachusetts, Connecticut, New York, New Jersey, Ohio, and Indiana. Unusually large numbers of eggs were observed during August. In the latter State this insect occasioned commercial damage for the first time since it has been known to occur in that State.

The hessian fly situation in general does not seem to be serious.

The lesser cornstalk borer was unusually abundant in the South Atlantic and Gulf States.

Chinch bug showed a marked increase in scattered areas in Iowa, Missouri, and Oklahoma.

The corn leaf aphid was destructively abundant in North Carolina with numerous reports from Ohio westward to Nebraska.

Second-brood codling moth was generally reported as moderately abundant, or scarce, throughout the Eastern States. In Washington State this insect increased in numbers rapidly during August and a heavy third brood is expected.

Throughout the New England and Middle Atlantic States the European red mite was rather abundant.

The second generation of plum curculio was more abundant than usual in the Fort Valley section of Georgia.

Oriental fruit moth was abnormally abundant in the southern New England, Middle Atlantic, and South Atlantic States, reports of infestations also being received from Mississippi and Ohio.

The walnut caterpillar defoliated many walnuts in the southern New England and Middle Atlantic States, westward to Michigan and Missouri.

The yellow-necked caterpillar was reported attacking apples from Connecticut through Pennsylvania to Illinois, Missouri, and northward to Minnesota.

The tarnished plant bug attacking various truck crops was reported from Vermont and New York.

A serious infestation of the salt-marsh caterpillar in truck gardens occurred in central Maine.

The tomato psyllid did considerable damage in Colorado, Montana, and Utah.

Mexican bean beetle continued to spread northeastward in Maine, and in New York State this insect occasioned serious injury. Similar heavy infestations of beans were reported from New Jersey, southward to Florida, and westward to Tennessee, Ohio, Indiana, Missouri, and Mississippi.

Pepper weevil occasioned from heavy to very heavy damage in southern California.

Boll weevil extremely numerous throughout the Cotton Belt, and doing serious damage to top and late-planted cotton.

Cotton leaf worm increasing rapidly and in many cases doing considerable ragging of cotton, and in southern Texas serious damage.

Bollworm damaging cotton from Georgia southward and around the Gulf region through Texas and Arizona with serious damage in many places.

Pink bollworm has been found in Kleberg, Nueces, and Brooks Counties, Tex. Five new counties have been placed under quarantine.

Leaf aphids are unusually abundant throughout the entire Cotton Belt, being particularly numerous in areas where dusting has been carried on.

The fall webworm was generally abundant throughout New England, Middle Atlantic, and South Atlantic States, westward to Ohio and Tennessee, and around the Gulf to Texas.

The forest tent caterpillar in New England and New York has seriously injured large numbers of red oaks and maples, this being the third year that heavy infestations occurred in that region.

Gypsy moth infestations are generally less severe than they were last year in the New England area.

Elm leaf beetle very abundant throughout New England and New York, with reports of local damage southward to Virginia and in the Ohio River Valley.

A serious outbreak of the southern pine beetle is occurring from southern Maryland to eastern North Carolina.

Quite a little damage has occurred to lawns in Connecticut, New York, and Pennsylvania by the hairy chinch bug. Similar damage by Blissus insularis Barber was reported from Florida.

Very heavy outbreaks of mosquitoes were reported from Connecticut, Massachusetts, and New Jersey.

Thirty-three cases of Rocky Mountain spotted fever, with eleven deaths, have been reported so far this year from Maryland. Seventeen cases of this disease were reported the first two weeks in August from Virginia.

Penthaleus major Duges, a mite, which attacks peas in Australia is recorded from California in this number of the Survey Bulletin.

GENERAL FEEDERS

GRASSHOPPERS (Acrididae)

Ohio. T. H. Parks (August 20): Although no more than normally abundant, grasshoppers are sufficiently numerous in a few localities to require control. Ripening peaches and corn were injured in central Ohio.

Kentucky. W. A. Price (August 24): Extremely abundant in August in low-land pastures in the vicinity of Lexington. Melanoplus femur-rubrum Deg. apparently the most common species.

Indiana. J. J. Davis (August 24): Isolated destructive but not extensive infestations in all parts of the State. Perhaps the greatest damage done to hybrid corn.

G. E. Gould (August 25): Abundant in many fields in the northern part of the State. Damage observed to carrot tops and carrots adjoining an uncultivated field.

Illinois. W. P. Flint (August 24): A decided decrease throughout the entire season. Now present in normal or subnormal numbers in most sections of the State.

Missouri. L. Haseman (August 24): Situation throughout the State about the same as a month ago. In northern Missouri some reports have come in of a partial second generation of the lesser migratory grasshopper (Melanoplus mexicanus Sauss.). At Columbia most of the eggs have already been deposited by the two-striped species (M. bivittatus Say) and the most abundant species still active is the differential grasshopper (M. differentialis Thos.). Hoppers decidedly less abundant than a year ago.

Minnesota. A. G. Ruggles and assistants (August): Grasshoppers from moderately abundant to very abundant throughout the State.

North Dakota. J. A. Munro (August 27): Grasshoppers moving around a great deal. Much of the Red River Valley, practically devoid of grasshoppers earlier in the season, is now overrun with them. In Walsh County, northeastern North Dakota, severe damage has been caused, especially to potatoes. Vines stripped in most fields so that nothing remained but the bare stalks of the plants. Egg laying well under way. In fields at Park River, Walsh County, egg pods of M. mexicanus occur at the rate of one per square foot, but along the margins the rate is a little higher.

Nebraska. M. H. Swenk (August 23): Caused serious general crop damage from July 21 to August 20. Specimens received from Deuel County on August 3 showed infestation by red mites Eutrombidium trigonum Hermann.

Kansas. H. R. Bryson (August 25): State as a whole remarkably free from serious grasshopper injury. In Clay, Riley, Cloud, and Jewell Counties, north-central Kansas, several cornfields have been damaged noticeably by grasshoppers but most of the fields are weedy.

Colorado. C. R. Jones (August 1): In most places the adult stage and the migratory forms can be seen in the air during the day.

Montana. H. B. Mills (August 20): A large migration of M. mexicanus invaded the eastern part of the State from the southeast on July 1. In the area bounded by Blaine, Petroleum, Musselshell, Treasure, Rosebud, and Powder River Counties, numbers of eggs now being laid in areas which were relatively free from hoppers prior to the migration. M. differentialis noted to be abundant and injurious along the Yellowstone Valley, from Sidney to Miles City. Brachystola magna Gir. and Dactylotum pictum Thos. reported from Valley County.

Utah. G. F. Knowlton (August 22): Control measures giving very good results in most cases. Farmers generally are applying them vigorously to save their alfalfa-seed and hay crops. M. mexicanus, M. femur-rubrum, M. packardii Scudd., and M. bivittatus are the species most commonly present in injurious numbers. Migrations from range to crop land somewhat later than usual this year owing to forage remaining green longer than usual on the range. Sarcophaga kellyi Ald. noted on August 1 as abundant and parasitizing grasshoppers in large numbers at Wilson's Mesa, Grand County.

MORMON CRICKET (Anabrus simplex Hald.)

Nebraska. M. H. Swenk (August 23): Infestation at Oshkosh, Garden County, continued to be commented on as late as the middle of August.

Utah. C. J. Sorenson (August 22): Scattered bands of varying sizes are ovipositing in the following areas: Juab County--West Tintic Mountains, west of Eureka; Millard County--Canyon Mountains, northwest of Scipio; Tooele County--Boulter Pass, Lofgreen, and Benmore districts and Hickman, Canyon district. A few scattered bands appeared in grainfields on August 6. In Sanpete County, northwestern Fountain Green area, there are a few crickets in alfalfa fields, also in the foothills and mountains to the westward.

FIELD CRICKET (Gryllus assimilis F.)

North Dakota. J. A. Munro (August 27): Abundant and causing severe injury to flax, alfalfa, and other crops in Richland County, southeastern North Dakota. Heavy damage done to some fields of alfalfa.

CUTWORMS (Noctuidae)

New York. N. Y. State Coll. Agr. News Letter (August 8): On Long Island the variegated cutworm (Lycophotia margaritosa saucia Hbn.), recently very abundant in some potato fields, has been almost eliminated because of parasitization by tachinid flies.

Georgia. O. I. Snapp (July 14): Cowpea plants in fields at Fort Valley, central Georgia, have been injured by a heavy infestation of cutworms.

WEBWORMS (Loxostege spp.)

Indiana. J. J. Davis (August 24): Report on August 20 of the garden, or alfalfa, webworm (L. similalis Guen.) as appearing in destructive numbers in alfalfa fields in Lagrange County, in the extreme northern part of the State.

Montana. H. B. Mills (August 20): First-generation sugar beet webworms (L. sticticalis L.) reported as damaging sugar beets and garden truck considerably in the western half of the State. Damage reported as far east as Phillips, Fergus, and Park Counties.

Utah. G. F. Knowlton (August 3): Moths of the sugar beet webworm came to light traps in northern Utah throughout July, heavy flights to the Syracuse trap light occurring from July 20 to 28. Larvae are abundant on Russian-thistle at Panguitch, Garfield County, southwestern Utah.

VELVETBEAN CATERPILLAR (Anticarsia gemmatilis Hbn.)

Louisiana. C. O. Eddy (August): This caterpillar present throughout the State, the most severe damage being confined to central and northern Louisiana, where seed crops are grown. Velvetbeans in southern Louisiana being plowed under rapidly.

WIREWORMS (Elateridae)

Kentucky. W. A. Price (August 24): Ripening tomatoes in the vicinity of Lexington are being injured considerably where fruit is in contact with the soil. The species involved is probably Aeolus dorsalis Say.

WHITE GRUBS (Phyllophaga spp.)

Maine. J. H. Hawkins (August 16): Many acres of timothy grass totally destroyed in Oxford County, southwestern Maine. Reseeding necessary in many places to maintain a stand of grass for hay and pasture. Wet places apparently affected the worst. Beets and carrots also attacked.

New York. N. Y. State Coll. Agr. News Letter (August 22): Damage in sod and pastures apparent in several sections of the State. Large areas in Steuben and Schuyler Counties are heavily infested, a brief survey on August 20 and 21 showing much injury. In some instances the dead turf can be rolled up like a carpet. Similar injury reported from sections of the Champlain Valley. Strawberries, beans, corn, and other cultivated crops on grub-infested land show injury.

Virginia. H. G. Walker (August): Reported as seriously injuring a field of strawberries near Greatbridge, Norfolk County.

Tennessee. G. M. Bentley (August 23): Reported on August 10 as very numerous in strawberry patches in Hamilton County, and as doing considerable damage to the plants.

Iowa. C. J. Drake (August 22): White grubs, Brood C, causing injury in truck fields near Council Bluffs, Pottawattamie County, western Iowa.

Utah. G. F. Knowlton (August 11): Damaging potato tubers at Panguitch, Garfield County, and Morgan and vicinity, in Morgan County, north-central Utah.

GREEN JUNE BEETLE (Cotinis nitida L.)

Kentucky. W. A. Price (August 24): Considerable damage caused to peach and nectarine fruits the latter part of July and the first week of August in the vicinity of Lexington.

Louisiana. C. O. Eddy (August): Beetles still flying abundantly.

W. E. Anderson (August 23): Fig-eater unusually numerous in the State.

JAPANESE BEETLE(Popillia japonica Newm.)

General. E. G. Brewer (August): Active flight of the beetle under way in most of the heavily infested sections by July 4. Swarming reduced late in July by heavy rains. Considerable reduction in the population at Richmond, Va., by the end of July, as well as in the District of Columbia, where only the eastern section remains heavily infested. A heavier infestation than in previous seasons reported around the railroad yards at Alexandria, Va. Beetle flight in Baltimore, Md., the heaviest in recent years. Beetles captured in nearly all traps set at College Park, Md., possibly indicating that infestations in District of Columbia and at Laurel, Md., have merged at College Park. Beetles numerous around Chester, Pa., coinciding with heavy flight noted between Wilmington and Dover, Del., but fewer beetles noted in Philadelphia than were observed last year. Heavy infestations were noted, however, in West Grove, Avondale, Kennett Square, Radnor, Hatboro, Newton, Willow Grove, Ambler, and Doylestown, Pa. Heaviest infestation ever observed at West Grove, Pa. At the peak of infestation at Norwood, Pa., from July 15 to 17, clusters of 75 or more beetles on rose blooms were quite common. Complete defoliation noted on cherry, elder, sassafras, primrose, morning-glory, and many roses. Chinese elms sprayed at Harrisburg, Pa. Some of the heaviest orchard defoliations in New Jersey occurred in Hunterdon County. An increase in beetle population indicated by reports from points in New England, such as New London, Conn., Springfield, Mass. and Brewer, Maine.

Connecticut. J. P. Johnson (August 22): Beetles abundant at Bridgeport, New Haven, Stamford, Greenwich, Hartford, New London, and Danbury until the second week in August, when the numbers began to decrease. A large infestation in East Hartford was stripping willow, sweet cherry, and plum, and feeding considerably on apple and elm. This infestation was centered along the river meadow land.

New York. M. Kisliuk, Jr. (August 15): Estimated that this beetle was twice as abundant this year as last during the flight season late in July and early in August. Serious local damage to many crops.

N. Y. State Coll. Agr. News Letter (August 8): Japanese beetles at the height of their destruction in the heaviest infestation ever observed in Westchester County. More in evidence in the northern end of the county in new areas, where they emerged 10 days later than in the southern end of the county. Forests being attacked where there is a variety of foliage. Little doubt that Japanese beetles are more numerous in Monroe County, western New York, this year than heretofore.

Delaware. E. P. Felt (August 23): Reported as excessively abundant and injurious in the vicinity of Wilmington.

Ohio. G. A. Runner (August 23): One specimen taken in a trap at Sandusky on August 19. This is the first record of the Japanese beetle in this area.

ASIATIC GARDEN BEETLE(Autoserica castanea Arrow)

New York. N. Y. State Coll. Agr. News Letter (August 8): Beetles have defoliated carrots in a few fields on Long Island where they have been causing a great deal of damage on a variety of vegetables.

District of Columbia. I. Smith (August 19): Asiatic garden beetle very destructive in a number of flower gardens in the northwestern section of Washington. Among the plants most seriously affected are chrysanthemum, Shasta daisy, bergamot, rose, zinnia, and phlox. (Det. by E. A. Chapin.)

M. Harriet Foster (August 4): Adults collected at night, feeding on flower-garden plants in the northeastern part of Washington on August 2. (Det. by E. A. Chapin.)

FULLER'S ROSE BEETLE (Pantomorus godmani Crotch)

Virginia. H. G. Walker (August 20): Larvae are feeding on the base of azalea bushes, barking them below the surface of the ground. They practically ruined four beds of azaleas in a nursery near Norfolk. (Det. by A. Boving.) Larvae and pupae were found in the soil under an elm tree near Norfolk. The larvae apparently had been feeding on the roots of the tree, as there was very little other vegetation.

South Carolina. O. L. Cartwright (July): Local outbreak at Westminster of Fuller's rose beetle on flowers and other plants.

Florida. A. N. Tissot (August 23): The beetle continues to be abundant in two tung-oil groves near Gainesville. Egg laying now going on rapidly, the eggs being deposited principally under the old bud scales. This insect also reported as doing considerable damage in a citrus nursery in Lakeland.

Louisiana. W. E. Anderson (August 23): Unusually numerous in the State.

A WEEVIL (Calomycterus setarius Roelofs)

Massachusetts. A. I. Bourne (August 26): Collected from a nursery in Holyoke, on the Connecticut River. The weevil was found indoors on wax begonia, kalanchoe, ivy, and chrysanthemum, and out of doors on one of the native poplars. Doing most damage to begonia. (Det. by L. L. Buchanan.)

Pennsylvania. L. J. Bottimer (August): Examples of this species received from H. P. Hopper, who collected them in Philadelphia on July 4.

COMMON RED SPIDER (Tetranychus telarius L.)

Massachusetts. A. I. Bourne (August 24): An unusual number of complaints of mites, or red spider, particularly on evergreens, received. This is somewhat surprising, considering the frequent heavy rains.

Pennsylvania. H. E. Hodgkiss (August 25): Reported as causing damage in various places.

Indiana. J. J. Davis (August 24): Rather abundant on some trees, such as soft maple and oak, causing leaves to whiten and, in the case of maple, sometimes to drop. Perennials, such as phlox, also heavily infested. Infestations rather general but more inquiries from the northern half of the State.

Michigan. R. Hutson (August 22): Two-spotted mite very common during July and August on all sorts of fruit trees, reported from Jonesville, Cassopolis, St. Joseph, Stevensville, Paw Paw, South Haven, Grand Rapids, Lansing, Farmington, and Mount Clemens.

Arkansas. D. Isely (August 22): Severe local injury to cotton has occurred throughout the Delta, northeastern Arkansas.

Kansas. H. R. Bryson (August 25): Causing considerable injury to elm trees. Abundant on late beans, garden flowers, and some varieties of weeds.

California. Exch. Pest Control Circ. (August): Red spiders more or less persistent during the summer, especially in the interior areas, where considerable treatment has been necessary. The recent hot spell has checked the pest to some degree but not sufficiently to eliminate the possibility of another early build-up.

CEREAL AND FORAGE - CROP INSECTS

WHEAT AND OTHER SMALL GRAINS

ARMYWORM (Cirphis unipuncta Haw.)

Maine. J. H. Hawkins (August 16): Corn, oats, barley, and timothy attacked by armyworms generally throughout Maine. Nearly all infestations in fields planted to oats and peas early last spring. No infestation noted in fields cultivated during June and July except where armyworms had dispersed from other centers of infestation. Apparently a remarkable absence of parasites and diseases.

Vermont. H. L. Bailey (August 27): Most of the July brood were pupating the last week in July; larvae of subsequent brood not reported up to August 26. Considerable number of adults at Guildhall, in Essex County, northeastern Vermont, on August 19. Heaviest infestation of July brood in the Connecticut River Valley and Rutland County, but scattering outbreaks reported in all counties except Grand Isle.

Massachusetts. A. I. Bourne (August 24): General and serious abundance of armyworms throughout much of Middlesex and Worcester Counties, central Massachusetts during the last week of July. Also isolated cases of abundance throughout the southeastern section of the State. Grass and other cover crops in orchards seriously damaged. A field of 7 acres of oats was ruined in 1 day at Brookfield. A 2-acre field of oats in Worcester County completely ruined. Not only the crop of oats but also the cover crops were devoured thus ruining prospects for next year's crop. Wilt disease and dipterous parasites abundant.

Connecticut. N. Turner (August 22): Serious damage to young sweet corn, especially tassels, in New Haven County at Mount Carmel and Branford.

New York. N. Y. State Coll. Agr. News Letter (August 1): The outbreak in the 20 known infested counties has subsided. Worms are heavily parasitized.

Virginia. H. G. Walker (August): Moths have been rather abundant at lights.

Minnesota. A. G. Ruggles (August): Armyworms abundant in some northwestern counties. Comparatively few parasites.

Oklahoma. F. A. Fenton (August 20): Armyworm at Ponca City, Kay County, in the north-central part of the State.

Texas. R. K. Fletcher (August 22): Doing considerable damage to Sudan grass in Presidio County, southwestern Texas. A heavy infestation on wheat and oats in Denton County, northeastern Texas, suddenly stopped by a small parasite.

HESSIAN FLY (Phytophaga destructor Say)

Michigan. R. Hutson (August 22): Light infestations in St. Joseph, Branch, and Calhoun Counties, southern part of the State on July 28.

Missouri. L. Haseman (August 24): There are not enough flaxseeds in the wheat stubble to cause serious alarm in any part of the State, though in spotted areas throughout the southern half of the State trouble is more likely to appear.

WHEAT STEM MAGGOT (Meromyza americana Fitch)

Texas. P. B. Dunkle (August 22): An exceptionally heavy infestation is occurring in Denton County where fully 50 percent of the culms are infested.

CORN

CORN EAR WORM (Heliothis obsoleta F.)

Maine. J. H. Hawkins (August 16): Usually confined to the coastal area of southwestern Maine, but now found over the greater sweet corn section of the State, including Orono.

New York. N. Y. State Coll. Agr. News Letter (August 22): Infestations in the Long Island area still extremely light. Examination of 100 plants in each of 9 fields shows an average infestation of only 11 percent, the infestations ranging from 0 to 28 percent.

South Carolina. W. C. Nettles (August 22): Damage is serious on late-planted corn.

Ohio. G. A. Runner (August 23): More than the usual abundance on sweet corn.

Indiana. E. V. Walter (August 23): Infestation in both sweet and dent corn lighter than usual.

Illinois. R. A. Blanchard (August 29): Observed to be abundant in dent corn in southern Illinois by late August. Infestation in central Illinois light at that time. Cannery corn in the Hoopeston area only lightly infested by August 19. Development of the insect apparently favored by the dry weather in parts of southern Illinois, whereas the abundance of rain in central Illinois has resulted in a low infestation.

Kentucky. W. A. Price (August 24): Infestations range up to 80 percent in some plantings of sweet corn in the vicinity of Lexington.

Mississippi. C. Lyle (August 24): Cotton bolls showing slight injury received recently from Jefferson Davis, Jones, and Pike Counties, south-central and southwestern Mississippi. Infestations in east-central Mississippi reported on August 22. Damage to corn and slight injury to cotton observed in southwestern Mississippi on August 20.

Louisiana. C. O. Eddy (August): Corn ear worm unusually abundant in ears and buds of young corn.

Missouri. L. Haseman (August 24): Field corn over the State showed very little infestation during the first 3 weeks in August. Increase indicated during the latter part of the month and moths now fairly abundant at Columbia.

Oklahoma. F. A. Fenton (August 20): Corn ear worm at Blackwell, Kay County.

Texas. R. K. Fletcher (August 22): Seriously injuring the heads of grain sorghums in some places in Brazos and Burleson Counties, east-central Texas.

Utah. G. F. Knowlton (August 1): Damaging 35 percent of the sweet corn examined at Willard, north-central Utah, and 35 percent of the ears examined at Moab, in the southeastern part of the State.

H. E. Dorst (August 23): Only about 35 percent of early and midseason sweet corn infested. Midseason corn showed only small larvae when corn was ready for market. Silking of the corn must not have synchronized with the peak of flight of the moths. Only an occasional larva observed in tomato fruits. Infestation very light to date.

FALL ARMYWORM (Laphygma frugiperda S. & A.)

Maine. J. H. Hawkins (August 16): Isolated instances found in sweet corn in the vicinity of Orono, Penobscot County.

Maryland. L. P. Ditman (August 23): An unusually heavy infestation in the neighborhood of College Park, damaging the curl of young corn, both sweet and field.

Virginia. C. G. Poole (August 12): Larvae are boring into and seriously injuring buds of late corn at Virgilina, in south-central Virginia. (Det. by C. Heinrich.)

H. G. Walker (August): Quite destructive to late plantings of field and sweet corn near Norfolk and on the Eastern Shore.

North Carolina. W. A. Shands (August 12): Considerable injury on late corn noted in the vicinity of Oxford, north-central part of the State.

Georgia. T. L. Bissell (August 1): Fall armyworms about two-thirds grown received from Zebulon, central Georgia. This is the first record for the year of damage by this insect. (August 22): A few worms seen this month at Experiment on cowpeas and in corn ears.

Mississippi. C. Lyle (August 24): Reported as causing considerable damage to corn in various sections of Mississippi during the last month. A 45-acre field in Monroe County, northeastern Mississippi, heavily damaged. Unusually severe damage reported on a number of farms in

Wayne County, southeastern Mississippi. Infestation stated to be general in the vicinity of Grenada, north-central Mississippi.

Louisiana. L. O. Ellisor and E. H. Floyd (August): Very abundant on young soybeans at Baton Rouge, doing considerable injury to the foliage; also feeding on a native grass.

Indiana. E. V. Walter (August 23): A field of corn at Shelbyville, southeastern Indiana, observed on August 18 to be badly damaged.

G. E. Gould (August 25): Found on August 18 on late sweet corn at La Fayette.

Missouri. L. Haseman (August 24): Late sweet corn and late field corn found to be attacked August 15 in various sections of the State, extending from the southeast through west-central, central, and northeastern Missouri. Apparently destructive in scattered patches over the fields or in gardens. Maturing and pupating on August 24.

Kansas. H. R. Bryson (August 25): Abundant and causing injury to corn in the eastern part of the State. Most severe damage reported from Chapman, where a 40-acre field of late corn is heavily infested. Another report of injury received from Arkansas City.

Texas. W. S. McGregor (August 22): Reported on corn in Dickens County, northwestern Texas.

EUROPEAN CORN BORER (Pyrausta nubilalis Hbn.)

New Hampshire. J. G. Conklin (August 29): Unusually destructive in southern New Hampshire this season. Present in moderate numbers as far north as North Conway.

Massachusetts. A. I. Bourne (August 24): Second brood just now becoming conspicuous. First brood considerably heavier than usual, particularly in the southern part of the Connecticut Valley region. In usual abundance elsewhere. Second-brood larvae observed rather earlier this year and found in large numbers the last of July and the first week of August. Indications from examination of fields during the egg-laying period and at present point to very great increase over last year's attack, particularly in the Connecticut Valley section of western Massachusetts. Also in Worcester County.

Connecticut. N. Turner (August 22): Second-generation eggs and larvae present. Infestation in late potatoes unusually heavy in some fields in Tolland County. Many reports of larval injury to dahlias, asters, and marigolds.

New York. N. Y. State Coll. Agr. News Letter (August 8): In eastern New York examination of dahlia plants in a 1-acre planting near Huntington showed the crowns of about 10 percent of the plants to be infested with first-instar larvae. (August 22): Infestations greatly increased,

particularly in corn ears. Examination of 100 ears in each of 5 fields shows an average infestation in ears of 42 percent, ranging from 32 to 49 percent. Dissection of 200 plants, which reached maturity 2 weeks ago, shows about 1 borer for every 2 plants. Dissection of only 20 plants from which corn is now being picked gave an average infestation of 5 borers per plant. About 90 percent of the individuals are in the larval stage, 9 percent in the pupal stage, and 1 percent emerged, as indicated by cast pupal skins. Younger plantings, not yet beginning to silk, show an average infestation of 48 percent, ranging from 17 to 64 percent. (August 15): In western New York a limited number of reports, indicating that damage is on the increase in Wayne County.

New Jersey. C. A. Clark (August 22): A very severe infestation in late corn developing in central New Jersey. Infestation in some fields will average over 30 borers per plant, with every plant infested. Corn in some fields is badly broken down. Infestation around Hightstown as bad as in the Allentown district in 1936. In the latter district corn growing has been practically abandoned.

E. Kostal (August 15): Heaviest infestation at Morganville, Monmouth County, since the insect was introduced into this area. Reported that young raspberry shoots are infested in some fields.

Ohio. T. H. Parks (August 20): Has made a spectacular increase in most parts of northwestern Ohio. Injury to sweet corn near Toledo severe, while complaints, accompanied by specimens, were sent in from as far south as Delaware County, central Ohio.

Indiana. J. J. Davis (August 24): Commercial damage has occurred for the first time in the history of the corn borer in this State.

LESSER CORNSTALK BORER (Elasmopalpus lignosellus Zell.)

North Carolina. W. A. Thomas (August 22): Late corn being attacked rather heavily in the vicinity of Whiteville, in the southern part of the State. Most of the premises where this insect is present indicate that a heavy growth of weeds or other crop refuse was on the land prior to planting.

South Carolina. W. C. Nettles (August 22): More numerous in the central part of the State than in any year since 1935.

Georgia. O. I. Snapp (August 16): Has injured young lima bean plants at Fort Valley, central Georgia.

Mississippi. C. Lyle (August 24): Severe injury to several fields of corn reported on August 22 from Lauderdale and Newton Counties, east-central Mississippi. Cowpea plants injured recently received from Columbus, Lowndes County, in the eastern part of the State.

Louisiana. C. O. Eddy (August): Reported to be doing a lot of damage on the later corn in a number of sections in southern Louisiana.

CHINCH BUG (Blissus leucopterus Say)

Iowa. C. J. Drake (August 22): Rapidly increasing in numbers in the three southern tiers of counties of the State, being particularly abundant in the western part of the area.

Missouri. L. Haseman (August 24): Infestations in numbers sufficient to alarm farmers continue to be spotted. The month of August decidedly favorable to the development of the insect.

Oklahoma. F. A. Fenton (August 20): Present in southeastern Oklahoma at Durant, Bryan County.

CORN LEAF APHID (Aphis maidis Fitch)

North Carolina. M. D. Leonard (July 30): Observed several badly infested fields and had reports that corn had recently been considerably infested in Martin County, in the northeastern part of the State. Continued rains slowed up the infestation recently.

Ohio. T. H. Parks (August 20): Outbreaks occurred in Union and Mercer Counties, western Ohio. Predators were abundant and effective.

Indiana. J. J. Davis (August 24): Between July 29 and August 14 numerous reports were received of severe infestations throughout the northern half of the State, with definite damage, especially to hybrid seed corn, in many cases.

E. V. Walter (August 23): More common than usual throughout the State until about August 10. Observations made at La Fayette at that time indicated that most of the bugs died within a few days.

Minnesota. A. G. Ruggles and assistants (August): Corn leaf aphid abundant in the following counties in central and southern Minnesota: Blue Earth, Chippewa, Faribault, Martin, Stearn, and Wright.

Iowa. C. J. Drake (August 22): Apparently unusually abundant. Infestations seem to be general and widespread. Complaints received from localities scattered throughout the State.

Nebraska. M. H. Swenk (August 23): Reported as attacking corn in Platte, Polk, and Washington Counties, eastern Nebraska, late in July and early in August.

Utah. G. F. Knowlton (August 3): Aphids are abundant on corn leaves at Spanish Fork.

CORN LANTERN FLY (Peregrinus maidis Ashm.)

North Carolina. W. A. Thomas (August 22): Observed to be unusually abundant on a small field of corn at Whiteville. The buds of the plants were completely covered with adults in many instances and egg laying was in full progress. The small corn is badly wilted as a result of the attack.

Texas. R. K. Fletcher (August 22): A very heavy infestation found on late field corn in Burleson County. Corn showed severe injury.

CORN ROOTWORM (Diabrotica longicornis Say)

Nebraska. M. H. Swenk (August 23): Beetles in abundance attacking corn plants in a Dodge County, east-central Nebraska, field on August 13.

CORN FLEA BEETLE (Chaetocnema pulicaria Melsh.)

Ohio. G. A. Runner (August 23): Extremely abundant in cornfields in several localities.

BILLBUGS (Calendra spp.)

South Carolina. W. C. Nettles (August 22): Damage by corn billbugs above normal in the east-central part of the State.

ALFALFA

PEA APHID (Illinoia pisi Kltb.)

Maine. J. H. Hawkins (August 16): More abundant in old clover fields than on clover which was seeded in canning peas this year at Unity, south-central Maine. A fungus disease completely controlled the aphids on late peas at Monmouth, south-central Maine, and at other places this summer.

Utah. G. F. Knowlton (August 22): Pea aphids not abundant on alfalfa in fields examined throughout the State during the latter part of July and in August.

PLANT BUGS (Lygus spp.)

Utah. C. J. Sorenson (August 22): Lygus hesperus Knight and L. elisus Van D. moderately abundant in alfalfa-seed fields of Millard County, west-central Utah, and very abundant in similar fields in the north-western part of Cache County, north-central Utah.

~~THREE-CORNERED~~ ALFALFA HOPPER (Stictocephala festina Say)

Texas. R. K. Fletcher (August 22): Very abundant on field peas in Brazos and Burleson Counties.

COWPEAS

COWPEA CURCULIO (Chalcodermes aeneus Boh.)

Georgia. T. L. Bissell (August 22): Early peas well infested at Experiment, central Georgia. (August 23): At a cowpea cannery at Mitchell, east-central Georgia, about 10 percent of the peas are reported to be stung by this insect. Last year the stings ran up to 30 percent and higher.

BEAN LEAF BEETLE (Cerotoma trifurcata Forst.)

North Carolina. W. A. Thomas (August 15): Doing considerable damage to field cowpeas over most of the territory surrounding Chadbourn. The foliage of the plants in many instances is completely riddled.

CLOVER HAY WORM (Hypsopygia costalis F.)

Mississippi. C. Lyle (August 24): Specimens received on July 3 from Gulfport, Harrison County, southern Mississippi, with a report that they were abundant in pea hay.

SORGHUM

SORGHUM WEBWORM (Celama sorghiella Riley)

Texas. R. K. Fletcher (August 22): Present on sorghum in Bell County, northern Texas. Also increasing on late-planted grain sorghum in Brazos and Burleson Counties.

SUGARCANE

BORERS (Diatraea spp.)

Florida. A. N. Tissot (August 23): Larger cornstalk borer (D. crambidoides Grote) sent in from Quincy, northwestern Florida, where it was injuring late corn.

Louisiana. B. A. Osterberger and E. R. Lett (August 8): Cane borers (D. saccharalis F.) very numerous in the De Ridder section, Beauregard Parish, southwestern Louisiana, on corn and sugarcane. Many eggs collected, 80 percent of which were parasitized by Trichogramma spp.

Texas. R. K. Fletcher (August 22): Sugarcane borer on rice in Matagorda County and on corn and sorghum in Galveston County, both counties located on the coast.

AN EAWIG (Doru aculeatum Scudd.)

Florida. A. N. Tissot (August 23): Several specimens sent in from Ocala, central Florida, where they were reported to be causing some damage to corn and sugarcane.

F R U I T I N S E C T S

YELLOW-NECKED CATERPILLAR (Datana ministra Drury)

Connecticut. G. H. Plumb (August): Larvae very abundant in the following localities: New Haven and Seymour, in New Haven County; Canton and Windsor, in Hartford County; and Greenwich, in Fairfield County. Stripping quite heavy on smaller oak trees at Windsor.

Pennsylvania. H. E. Hodgkiss (August 25): Yellow-necked caterpillar generally abundant in apple orchards.

Illinois. W. P. Flint (August 24): Abundant throughout the State.

Minnesota. A. G. Ruggles and assistants (August): Abundant near Hibbing and Virginia, in St. Louis County, and on apple, ornamental walnut, and black walnut trees in Dakota County, both counties in eastern Minnesota.

Missouri. L. Haseman (August 24): Second-generation larvae beginning to appear at Columbia.

RED-HUMPED CATERPILLAR (Schizura concinna S. & A.)

Maine. F. H. Lathrop (August 22): Increase in infestation in central and southern Maine this summer.

Pennsylvania. H. E. Hodgkiss (August 25): Reported from various localities throughout the State.

Montana. H. B. Mills (August 20): Observed at Dixon, northwestern Montana.

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

Indiana. L. F. Steiner (August 25): Adults found boring into the fruit on a weak apple tree at Vincennes, southwestern Indiana. Tree showed no evidence of prior attack. Feeding apparently incidental to oviposition. As many as eight feeding cavities on individual apples.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

Texas. R. K. Fletcher (August 22): San Jose scale recorded from Bexar County, south-central Texas, on plum and pecan.

APPLE

CODLING MOTH (Carpocapsa pomonella L.)

New York. D. W. Hamilton (August 26): First-brood adults began appearing in bait traps at Poughkeepsie on July 24; peak captures from August 2 to 5; daily bait-trap captures tapering off from August 5 to the present, when few moths being captured. Second-brood entrances

present by August 1 and gradually increasing in numbers through August 13. Injury in most orchards lighter than during the previous two seasons.

N. Y. State Coll. Agr. News Letter (August 15): Control measures still necessary in western New York against second brood.

New Jersey. E. Kostal (August 15): Following a light first brood, moderate infestation of second brood on apple at Morganville, in Monmouth County.

Pennsylvania. H. E. Hodgkiss (August 25): Second-brood entrances observed in the south-central counties during mid-August.

Virginia. W. J. Schoene (August 23): Infestation in central Virginia apparently influenced by heavy and continued precipitation during June and July, as fewer worms have been reported than for many years.

W. S. Hough (August 19): Peak of first-brood attack about June 22-26, 3 weeks later than normal. Second-brood injury occurring in August, whereas it is usually expected during the last week of July in Frederick, Clarke, and Shenandoah Counties, northern Virginia.

A. M. Woodside (August 20): Infestation increasing fairly rapidly during the last 3 weeks in Augusta County, northwestern Virginia. Flight and egg laying by first-brood moths over in the insectary and declining sharply in the orchards. Very few second-brood larvae have pupated.

South Carolina. W. C. Nettles (August 22): Infestation apparently high, perhaps because of light crop.

Ohio. T. H. Parks (August 20): Bait-pan catch of second-brood moths continuing at Columbus, but showing only a light population. Infestation over the State probably less than normal, with prospects of heaviest damage in old orchards located near Toledo.

Kentucky. W. A. Price (August 24): Extremely abundant at Henderson, western Kentucky, in orchards with small crops of fruit, where later control measures were omitted. On August 13 as high as 27 stings and entries were found on a single fruit.

Indiana. L. F. Steiner (August 25): Hatching of third-brood larvae at Vincennes now apparently at its peak. Infestation about normal in well-sprayed orchards. Most larvae now leaving apples and appearing to enter hibernation. Adults of the first brood at their maximum abundance about mid-July; in most orchards no well-defined peaks; and attack throughout July and August continuous and heavy.

Michigan. R. Hutson (August 22): Peak of flight of moth apparently at South Haven on August 15. Moths appeared in cages throughout the State as follows: Monroe, Eau Claire, and Allegan on July 18; Vandalia on July 19; Saint Joseph, Monroe, and Lapeer on July 20; Buchanan, Ann Arbor, Albion, South Haven, and Birmingham on July 21; Grand Rapids on July 25; Fennville on July 26; Grand Rapids, South Haven, and Lawton on July 28; Shelby on July 30; Rockford on August 1; Old Mission on August 2; Rapid City on August 4; Beulah on August 5; Traverse City on August 6; and Cheboygan on August 8.

Missouri and Kansas. H. Baker (August 23): Peak bait-trap catches of first-brood moths taken in northeastern Kansas and northwestern Missouri on August 13. Other peak catches on July 14, July 24, and August 3. Second-brood damage about normal.

Missouri. L. Haseman (August 24): Codling moth very irregular in its development, and appearance of third-generation moths about 2 weeks later than normal. Usually reaches height of emergence around Columbia on August 15 but apparently coming around September 1 this year, causing probably only a partial third generation.

Utah. C. J. Sorenson (August 22): Moderately abundant in Utah County, north-central Utah.

Washington. E. J. Newcomer (August 16): First-brood moths appearing in baits in numbers from June 23-28 in the Yakima Valley, south-central Washington. Maximum reached during the 10 days from July 13 to 22, although large numbers are still being caught. Second brood about a month earlier than in 1937 and a larger third brood than usual is expected.

LEAF MINERS (Gracilariidae)

New York. N. Y. State Coll. Agr. News Letter (August 8): Considerable tentiform leaf miner injury showing in several orchards in Columbia County, eastern New York. (August 15): Leaf miners, the spotted tentiform (Lithocolletos blancardella F.) and the unspotted tentiform (Ornix geminatella Pack.), causing considerable injury to apple and quince foliage in one orchard in Orleans County, western New York.

Delaware. L. A. Stearns (August 19): The unspotted tentiform leaf miner is causing considerable damage to foliage of apple at Cheswold, Kent County, frequently making from 3 to 5 mines per leaf.

Virginia. W. S. Hough (August 19): Two species of leaf miner (L. blancardella and O. geminatella) more abundant than usual in Frederick and Clarke Counties. Adults very numerous late in July and early in August. Apple foliage in restricted areas showed considerable damage.

APPLE MAGGOT (Rhagoletis pomonella Walsh)

Maine. F. H. Lathrop (August 22): An increased infestation in apples in

the central and southern parts of the State. A distinct increase in infestation of blueberries in Washington County, eastern Maine.

Vermont. H. L. Bailey (August 27): Reported as more than usually abundant in southern Vermont.

New York. N. Y. State Coll. Agr. News Letter (August 8): Present on Long Island, concentrated on transparent crab. Egg stings very numerous on this variety.

New Jersey. E. Kostal (August 15): Infestation in apples heavy in early and midseason varieties at Morganville, Monmouth County. Damage moderate to severe.

EUROPEAN RED MITE (Paratetranychus pilosus C. & F.)

Connecticut. P. Garman (August 22): Infestation most severe in mid-July. Worse on varieties heavily treated for disease control.

New York. N. Y. State Coll. Agr. News Letter (August 15): In western New York red mites on prunes still serious in orchards where proper control measures were omitted.

Pennsylvania. H. E. Hodgkiss (August 25): European red spider continuing to cause heavy foliage damage in apple orchards throughout the State.

Virginia. W. S. Hough (August 19): More abundant than ever observed in 17 years' residence in the orchard region of Frederick County. Foliage in some orchards shows the characteristic pale coloration caused by mites.

British Columbia. E. J. Newcomer (July 21): European red mite very numerous, and spraying for it general in the Okanogan Valley, southern British Columbia, bordering on Washington.

PEACH

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Maine. F. H. Lathrop (August 22): New adults emerging during August, resulting in a slight increase in the number of curculios near Monmouth, Kennebec County, south-central Maine. No evidence of oviposition by the new adults.

Vermont. H. L. Bailey (August 27): Causing a large amount of damage to apples throughout the State.

Virginia. A. M. Woodside (August 20): Only a small percentage of the first-brood adults deposited eggs. No eggs deposited in the insectary after July 19. Fruit infestation at harvest light in Albemarle County, north-central Virginia.

West Virginia. H. W. Allen (August 22): Infestation rather severe in peaches being harvested in the vicinity of Martinsburg, northeastern West Virginia, on August 15.

Georgia. O. I. Snapp (August 19): Second-generation adults emerging in large numbers at Fort Valley, central Georgia, from August 10 to 15. Of 210 adults taken from 30 trees on August 10 and 218 taken from 30 trees on August 15, practically all were second-generation beetles. Population in central-Georgia peach orchards increased materially during August and is now heavier than that of the average year. Seventy-one percent of first-generation females deposited eggs this year.

Kentucky. W. A. Price (August 24): Second-generation larvae infesting ripe peaches at Shakertown and Jonesville, north-central Kentucky, and at Paducah, western Kentucky, late in July and early in August. Second-generation adults emerging during the third week of August.

CITRUS ROOT WEEVIL (Pachnaeus opalus Oliv.)

Georgia. O. I. Snapp (August 15): Taken on August 15 from a peach tree at Fort Valley while jarring for plum curculio. Previously taken from a peach tree here on July 8, 1924. Rare in Georgia.

ORIENTAL FRUIT MOTH (Grapholitha molesta Busck)

Connecticut. P. Garman (August 22): More abundant than usual. Early peaches heavily infested.

New York. N. Y. State Coll. Agr. News Letter (August 1): Not the usual amount of damage to terminals of peaches in Monroe County, western New York.

Maryland, Virginia, and West Virginia. H. W. Allen (August 22): Infestation counts of peaches recently completed in a number of localities in Maryland, Virginia, and West Virginia. Heavy infestation in the vicinities of Harrisonburg and Timberville, Va. Moderately heavy infestation in the vicinities of Staunton and Winchester, Va. Despite a very favorable season for development, infestation at Crozet, Va., and in Washington County, Md., very light. Parasitization normally heavier in Washington County, Md., and in Crozet, Va., than in any of the other districts mentioned in this survey.

Virginia. W. S. Hough (August 17): Larvae caused cullage of 20 percent of peaches harvested in Frederick and Shenandoah Counties. Damage in the Timberville district apparently greater than observed in that area for a number of years.

Georgia. O. I. Snapp (August 19): Flowering peach trees, planted on the streets of Fort Valley, attacked, many terminals of trees being damaged. Also the case in some nonbearing peach orchards.

Mississippi. C. Lyle (August 24): Apple fruit containing a larva received from Oktibbeha County, east-central Mississippi, on August 23. Several complaints of injury, evidently caused by this species, received from various sections of the State. Injury in the northeastern part of the State reported as quite conspicuous, many young trees having been attacked.

Ohio. G. A. Runner (August 23): Twig injury abundant and general owing to good growth caused by wet season. Varieties of peaches now ripening not seriously damaged, the early ripening of the fruit apparently helping to reduce fruit injury.

PEACH BORER (Conopia exitiosa Say)

Georgia. O. I. Snapp (August 19): Cocooning increased rapidly from August 11 to 13 at Fort Valley, but peak expected a little later than usual. Thirty-six cocoons collected on August 11, and 52 on August 13, during the same length of time. Infestation moderate.

Mississippi. C. Lyle (August 24): Adults now emerging in the vicinity of State College, northeastern Mississippi. Moderate damage to peach trees reported from Hinds and Madison Counties, central Mississippi.

Oklahoma. F. A. Fenton (August 20): Peach tree borer reported at Vian, Sequoyah County, eastern Oklahoma.

PEACH TWIG BORER (Anarsia lineatella Zell.)

Utah. G. F. Knowlton (August 1): Injury severe in peaches examined at Castleton, southeastern Utah.

PEAR

PEAR PSYLLA (Psyllia pyricola Foerst.)

New York. N. Y. State Coll. Agr. News Letter (August 15): Control measures being applied in some orchards in western New York. Large percentage of late brood washed off by recent heavy rains.

PEAR LEAF-ROLLING MIDGE (Dasyneura pyri Kieff.)

New York. E. P. Felt (August 23): Pear leaf midge found in small numbers at Cold Spring Harbor, Long Island.

CHERRY

PEAR SLUG (Eriocampoides limacina Retz.)

Pennsylvania. H. E. Hodgkiss (August 25): Pear slug somewhat abundant on cherry in the northeastern counties of the State.

Indiana. J. J. Davis (August 24): Cherry and pear slug defoliated cherries during the first half of August in southern and central Indiana.

GRAPE

GRAPE LEAF FOLDER (Desmia funeralis Hbn.)

Mississippi. C. Lyle (August 24): Injured grape leaves received from Long Beach, Harrison County, southeastern Mississippi, on August 22. Also abundant on grapes at State College.

California. G. H. Kaloostian (August 6): First adults of second generation observed at Fowler, in Fresno County, central California, on August 5 and 6. A third-brood larva, about 4 days old, also observed on August 6. The insect is a new pest in this district, and has spread during the last two years more than 10 miles westward from the Sanger-Parlier districts.

GRAPE BERRY MOTH (Polychrosis viteana Clem.)

Ohio. G. A. Runner (August 23): Damage from the late brood threatening to be serious, owing to concentration on an extremely light crop of grapes in some localities. In vineyards bearing a full crop, percentage of damaged grape berries apparently not greater than in 1937.

SIX-SPOTTED GRAPE BEETLE (Pelidnota punctata L.)

Pennsylvania. H. E. Hodgkiss (August 25): Spotted vine chafer plentiful but not so abundant as in some years.

Nebraska. M. H. Swenk (August 23): Specimens sent from Clay County, southern Nebraska, on July 25, where they were attacking grapevines.

APPLE TWIG BORER (Schistoceros hamatus F.)

Mississippi. C. Lyle (August 24): Adults received on August 22 from Long Beach, Harrison County, with the statement that the beetles had practically destroyed the top growth of a grape planting.

GRAPE SAWFLY (Erythraspides pygmaea Say)

Massachusetts. A. I. Bourne (August 24): Larvae found very numerous in a planting near the college in Amherst, west-central Massachusetts.

Pennsylvania. H. E. Hodgkiss (August 25): Grapevine sawfly causing some damage in the northeastern counties.

GRAPE LEAFHOPPERS (Erythroneura spp.)

New York. N. Y. State Coll. Agr. News Letter (August 8): Grape leafhopper (E. comes Say) doing considerable damage in some vineyards in Columbia County.

Ohio. G. A. Runner (August 23): Various species of Erythroneura in general not so abundant and injurious as in former years. In some instances, where control measures were omitted, the late summer brood is heavy. Of the forms present in the Sandusky area, north-central Ohio, the three-banded grape leafhopper (E. tricineta var. cymbium McAtee) is the most abundant.

Nebraska. M. H. Swenk (August 23): Reported as attacking grapes in Lancaster County, eastern Nebraska, on August 5, and woodbine vines in Garden County, western Nebraska, on August 18.

Utah. G. F. Knowlton (August 22): Grape leafhoppers seriously damaging foliage of grape and Virginia creeper in many parts of Utah.

GRAPEVINE APHID (Aphis illinoisensis Shim.)

Ohio. G. A. Runner (August 23): Brown grape aphid prevalent in the Sandusky area, but not abundant enough to cause important injury.

GRAPE MEALYBUG (Pseudococcus maritimus Ehrh.)

Ohio. G. A. Runner (August 23): Grape mealybug common in many vineyards but not abundant in the Sandusky area.

PECAN

APHIDS (Aphididae)

Georgia. T. L. Bissell (August 24): Trees noticeably spotted by the feeding of the black pecan aphid (Melanocallis caryaefoliae Davis) at Milner and Griffin, central Georgia, but as yet no defoliation observed.

Mississippi. C. Lyle (August 24): General discoloration on leaves of most pecan plantings in the vicinity of Meridian, eastern Mississippi, caused by black pecan aphids. Light infestation in Jackson, Hinds County. Specimens of Longistigma caryae Harr. sent in on August 23 from Canton, Madison County, central Mississippi, with report that they were very abundant on pecan trees.

Texas. C. B. Nickels and W. C. Pierce (August 7): Black-margined aphid (Monellia costalis Fitch) more abundant than usual on pecan at Crystal City, Gustine, Branbury, and Stephenville, central and southern Texas. Leaves from 50-to 100-percent infested.

HICKORY-NUT CURCULIO (Conotrachelus affinis Boh.)

Mississippi. C. Lyle (August 24): Small percentage of pecan drops received from Shaw, Bolivar County, Meridian, Lauderdale County, and Tchula, Holmes County, found to be infested.

PECAN WEEVIL (Curculio caryae Horn)

Georgia. T. L. Bissell (August 24): No weevils or damage to pecan trees observed on August 23 at Sparta, central Georgia, although known to be present in this locality. On August 24 weevils at Milner about one-third as abundant as a week ago, probably owing to dry weather which is hindering emergence from soil.

WALNUT

WALNUT CATERPILLAR (Datana integerrima G. & R.)

Connecticut. G. H. Plumb (August): Considerable defoliation noticed at New Haven and Windsor, particularly on smaller trees at Windsor.

E. P. Felt (August 23): Walnut caterpillar somewhat abundant and injurious in southwestern Connecticut.

New Jersey. H. W. Allen (August 22): Extensive defoliation of black walnut noted in several counties of southern New Jersey. Stripping was complete on many trees, but following abundant rainfall, many trees have put out new foliage and partly recovered from the defoliation.

T. H. Jones (August 20): Black walnuts growing in northern New Jersey commonly defoliated, presumably by this species.

Pennsylvania. H. E. Hodgkiss (August 25): Reported as very abundant.

Delaware. L. A. Stearns (August 12): General on walnut throughout the State.

Ohio. E. W. Mendenhall (August 15): Walnut trees throughout central and southern Ohio nearly all defoliated.

Indiana. J. J. Davis (August 24): Walnut trees defoliated throughout central Indiana, and reported from other parts of the State also.

Illinois. W. P. Flint (August 24): Defoliation of walnuts and hickories quite general over the State.

Michigan. R. Hutson (August 22): Numerous around Detroit, South Haven, Benton Harbor, and Monroe. Apparently full-grown specimens collected at Kalamazoo on August 9.

Missouri. L. Haseman (August 24): At Columbia laboratory-reared first-generation walnut caterpillars are emerging as adults, but no evidence of emergence out of doors. A partial second generation is expected.

CITRUS

WHITEFLIES (Dialeurodes spp.)

Florida. J. K. Holloway (August 18): In the vicinity of Orlando, central Florida, whiteflies (D. citri Ashm. and D. citrifolii Morg.) are completing the summer generation. Peak emergence has not been reached. Some eggs, and a few first-stage nymphs of the autumn brood observed.

Mississippi. C. Lyle (August 24): Reports from various parts of the State indicate that whiteflies (D. citri) are abundant on various ornamental plants.

PURPLE SCALE (Lepidosaphes beckii Newm.)

Florida. H. Spencer (August 20): Purple scale spreading rapidly from twigs and older leaves to the new growth and fruits.

California. Exch. Pest Control Circ. (August): A noticeable build-up throughout the Whittier-Rivera area, in Orange County during the last year.

FLORIDA RED SCALE (Chrysomphalus aonidum L.)

Florida. H. Spencer (August 20): Much in evidence on the eastern coast. Second reproductive peak of the year, starting about the middle of May, is still in progress with a few females still producing eggs. Infestations not so severe in the central-Ridge section.

CALIFORNIA RED SCALE (Chrysomphalus aurantii Mask.)

California. Exch. Pest Control Circ. (August): Rapid increase in red scale in the interior areas during July. Beginning now to show a build-up toward the coast. Heavily infested orchards in the interior show green oranges deeply pitted by the young scale.

BLACK SCALE (Saissetia oleae Bern.)

California. Exch. Pest Control Circ. (August): Completion of hatch hastened by recent hot spell. Mortality of young to date of no consequence. A tendency toward build-up noted this year in such areas as Rivera and Anaheim, southern Orange County. Control measures necessary in double-brooded areas of Orange, Los Angeles, and Ventura Counties, as well as in the resistant black scale area of eastern Los Angeles County and western San Bernardino County (Pasadena to Cucamonga).

A LEAF-CUTTING ANT (Atta sp.)

Florida. H. Spencer (August 20): Have had called to our attention a third case of injury to newly planted citrus from leaf-cutting ants, probably Atta septentrionalis subsp. obscurior var. seminole Wheeler. In each case the trees had been planted on land recently cleared of underbrush. Some of young trees had all leaves stripped off by these ants. Damage in one instance was increased by work of grasshoppers and larvae of the orange dog (Papilio thoas L.).

A BUD MITE (Eriophyes sheldoni Twing)

California. A. M. Boyce (August 19): Bud mite infestation serious, causing extensive injury on thousands of acres of lemons at Santa Paula, southern California, and some injury on oranges.

CITRUS RUST MITE (Phyllocoptes oleivorus Ashm.)

Florida. H. Spencer (August 20): More russetting this season than usual but infestations are subsiding naturally.

Louisiana. C. O. Eddy (August): Extremely abundant and doing a lot of damage where control measures were not applied consistently.

FIG

THREE-LINED FIG BORER (Ptychodes trilineatus L.)

Mississippi. C. Lyle (August 24): Specimens on fig received from Laurel, Jones County, southeastern Mississippi, on July 25.

PERSIMMON

PERSIMMON PSYLLA (Trioza diospyri Ashm.)

Louisiana. C. O. Eddy (August): Common on wild persimmons throughout the season. Especially abundant on the older trees early in the season and has continued on the smaller shrubs.

SEAGRAPE

WOOLLY WHITEFLY (Aleurothrixus howardi Quaint.)

Florida. E. A. Back (June 19): Woolly whitefly colonies found on seagrape foliage at Key West.

TRUCK - CROP INSECTS

BLISTER BEETLES (Meloidae)

Ohio. E. W. Mendenhall (August 22): Black blister beetles (Epicauta pennsylvanica Deg.) are injurious on gladiolus flowers in Franklin County, central Ohio.

Arkansas. D. Isely (August 22): Blister beetle injury reported from practically all counties in the northern half of the State. Most of the specimens submitted are striped blister beetle (E. vittata F.).

Mississippi. C. Lyle (August 24): Considerable damage to late tomatoes by E. lemniscata F. reported from various sections of the State. Specimens of E. marginata F. were sent in on August 19 from Paulding, Jasper County, southeastern Mississippi, with the report that they were found on practically all garden plants.

Nebraska. M. H. Swenk (August 23): Blister beetles reported damaging potato and tomato in Dawson County, central Nebraska, on August 1, and tomatoes and other garden crops in Pawnee County, southeastern part of the State, on August 2. Gray blister beetle (E. cinerea Forst.) reported attacking tomato, principally, and potato plants in Richardson, Douglas, and Jefferson Counties during late July and early August. Complaints of damage to tomato, and in one instance, pigweed, by striped blister beetle (E. lemniscata F.) were received from Richardson, Douglas, Pawnee, Lancaster, and Kearney Counties during the latter part of July. The immaculate blister beetle (Macrobasis immaculata Say) was reported late in July from Adams and Kearney Counties in the south-central part of the State, where it was damaging potatoes and Chinese elm trees. Tomatoes, potatoes, and other garden crops in Richardson, Seward, and Jefferson Counties reported damaged by the segmented blister beetle (M. segmentata Say).

Kansas. H. R. Bryson (August 24): Blister beetles abundant but for the most part not doing much damage. Pigweed and other weeds apparently heavily infested. Injury to crops largely confined to tomato patches.

CUCUMBER BEETLES (Diabrotica spp.)

Massachusetts. A. I. Bourne (August 24): Summer brood of striped cucumber beetles present during the early part of the month and much more abundant than usual for this brood.

South Carolina. J. G. Watts (August 10-25): Spotted cucumber beetle, banded cucumber beetle, and striped cucumber beetle abundant on fall cucumbers and coming to trap light in larger numbers than at any time during this season. Field estimates on D. vittata show that they are no more abundant now than they were on early summer cucumbers. Observations made at Blackville, Barnwell County, in the southwestern part of the State.

- Mississippi. C. Lyle (August 24): Injury to late watermelons by D. vittata reported recently from Rankin and Hinds Counties, western Mississippi, and from Tate County, northwestern Mississippi. On July 28 specimens were received from Itawamba County, northeastern Mississippi, with the report that they were very abundant and causing much damage to watermelons.
- Iowa. C. J. Drake (August 22): Southern corn rootworm (D. duodecimpunctata F.) reported as damaging corn at Harlan, Council Bluffs, and in other parts of Pottawattamie and Shelby Counties, western Iowa.
- Missouri. L. Haseman (August 24): Late cucumbers and squash at Columbia were recently very severely attacked by swarms of striped cucumber beetles. The 12-spotted beetle is equally abundant and even more destructive than the former at Columbia.
- Minnesota. A. G. Ruggles and assistants (August): In Hennepin County, southeastern Minnesota, and Pipestone County, southwestern Minnesota, striped cucumber beetles are very abundant.
- Texas. J. N. Roney (August 22): Cucumber beetles (D. duodecimpunctata and D. balteata) reported on tomato, collards, eggplant, pepper, and mustard in Galveston County, southeastern Texas.
- Montana. H. B. Mills (August 20): Striped cucumber beetle appeared for the first time in Montana this year, according to our records. Specimens identified from Culbertson, Roosevelt County, northeastern Montana, and from Billings, Yellowstone County, in the south-central part of the State.
- Utah. G. F. Knowlton (August 1): D. duodecimpunctata damaging cucumbers at Moab.

TARNISHED PLANT BUG (Lygus pratensis L.)

- Vermont. H. L. Bailey (August 27): Very abundant in potato fields in Orleans and Caledonia Counties, northeastern Vermont.
- New York. N. Y. State Coll. Agr. News Letter (August 8): Causing noticeable injury to cauliflower heads in Delaware County, eastern New York. In western New York in upland fields they are numerous. They are more abundant than usual in up-State New York and in some places doing considerable damage. (August 22): In Wayne County, western New York, the bugs are still fairly numerous in celery fields and considerable fresh damage was found this week.

SALT-MARSH CATERPILLAR (Estigmene acraea Drury)

- Maine. J. H. Hawkins (August): In central Maine a serious outbreak on corn, beans, lettuce, and other vegetables was checked by an unidentified fungus disease, which killed most of the caterpillars before they were fully grown but not until serious injury was inflicted,

especially to vegetable gardens.

CRICKETS (Gryllidae)

Indiana. G. E. Gould (August 25): Crickets abundant in many fields in the northern part of the State; damage to carrots noted adjoining an uncultivated area.

G. J. Horvath (August 23): Mole cricket (Gryllotalpa hexadactyla Perty) sent in from South Bend. (Det. by A. B. Gurney.)

Missouri. L. Haseman (August 24): Unusually large number of mole crickets received during the month from northern, central, and southern Missouri.

Texas. J. N. Roney (August 22): Mole crickets (G. hexadactyla and Scapteriscus acletus R. & H.) reported on pepper, eggplant, black-eyed peas, cabbage, mustard, tomato, and collards in Galveston County.

POTATO

COLORADO POTATO BEETLE (Leptinotarsa decemlineata Say)

Maine. J. H. Hawkins (August 16): Persisting in central and southern Maine, where control measures have not been followed throughout the season.

New York. N. Y. State Coll. Agr. News Letter (August 8): Second-generation beetles began laying eggs last week in western New York.

South Carolina. J. G. Watts (August 26): At Blackville a few adults have been found on tomato plants throughout the month of August.

Minnesota. A. G. Ruggles and assistants (August): Very abundant in the following counties scattered throughout the State: Aitkin, Carlton, Pipestone, Pope, Saint Louis, and Sherburne.

Nebraska. M. H. Swenk (August 23): Reported as attacking eggplant and tomato to a serious degree in Wayne County, northeastern Nebraska, on August 9.

POTATO FLEA BEETLES (Epitrix spp.)

Maine. J. H. Hawkins (August 16): Early infestation of E. cucumeris Harr. on potatoes in central Maine not followed by severe injury by the second brood, such as normally occurs.

Connecticut. N. Turner (August 22): Locally abundant in the entire central part of the State. Serious damage caused to potatoes and tomatoes late in July.

New York. N. Y. State Coll. Agr. News Letter (August 1): The beetle was reported to have been particularly noticeable on Long Island during the last week, emerging in large numbers from land planted to Cobblers,

the vines of which are dead. Border rows of Green Mountains and adjacent areas of lima beans received serious foliage injury by feeding adults.

Colorado. C. R. Jones (August 1): Prevalent on potatoes on the Western Slope.

Utah. G. F. Knowlton (August 1): Injury to potato foliage by the potato flea beetles (E. cucumeris and E. subcrinita Lec.) has been severe in several localities in Weber County, north-central Utah.

BEET LEAFHOPPER (Eutettix tenellus Bak.)

Utah. H. E. Dorst (August 23): Damage to tomatoes in the form of western yellow blight is approximately 15 percent less than last year. At Hooper, in northern Utah, in 1937 the damage averaged 45 percent, as compared to 30 percent this year.

POTATO LEAFHOPPER (Empoasca fabae Harr.)

Connecticut. N. Turner (August 22): Apparently less abundant than usual in the entire potato-growing section.

New York. N. Y. State Coll. Agr. News Letter (August 15): In western New York, leafhoppers were present in large numbers on the remaining green foliage on muckland. On the upland leafhoppers began to show up in experimental plots in Genesee and Monroe Counties. In Wyoming County, injury was on the increase, although severe in only a few spots.

Virginia. H. G. Walker (August): Late potatoes near Norfolk are moderately infested. A field of young beans was also reported as being very heavily infested.

Minnesota. A. G. Ruggles and assistants (August): Very abundant in the following counties: Carlton, Crow Wing, Hennepin, Pope, Ramsey, and Saint Louis.

Utah. G. F. Knowlton (August 22): Moderate injury to potato foliage in northern Utah.

TOMATO PSYLLID (Paratrioza cockerelli Sulc.)

Colorado. C. R. Jones (August 1): Prevalent on potatoes and tomatoes where considerable damage is being done.

Montana. H. B. Mills (August 20): Has done considerable damage throughout the plains area of Montana. Reported from Great Falls, Bozeman, Stillwater County, Lavina, Bridger, Fromberg, Billings, Huntley, Miles City, and Sidney.

Utah. G. F. Knowlton (August 22): Injury to potatoes not reported very frequently.

GREEN PEACH APHID (Myzus persicae Sulz.)

Indiana. G. E. Gould (August 25): Aphids, probably this species, reported as a severe infestation on 100 acres of potatoes at North Judson, in northwestern Indiana, on August 2. Investigation a week later disclosed no lice. Coccinellid larvae were very abundant.

HORNWORMS (Protoparce spp.)

New Hampshire. J. G. Conklin (August 29): Tomato worm (P. quinquemaculata Haw.) unusually prevalent throughout the State.

Vermont. H. L. Bailey (August 27): Tomato hornworm (P. sexta Johan.) is unusually abundant throughout the State. Entire loss of several acres reported from Burlington, Chittenden County, in northwestern Vermont.

Missouri. L. Haseman (August 24): Tomato worm moths very abundant in flower gardens until about the middle of August, but practically disappeared in the last 10 days. Larvae now feeding on tobacco and tomatoes at Columbia.

Utah. H. E. Dorst (August 23): One field in northern Utah observed where 20 percent of the tomato plants were damaged by tomato hornworm. Most fields average from 2- to 5-percent infestation. Ordinarily little damage is observed in this area.

California. J. C. Elmore (August 17): The tomato hornworm is numerous on pepper plants; 180 worms per acre, or 2 per 100 plants, were counted in a pepper field near Long Beach, Los Angeles County.

BEANS

MEXICAN BEAN BEETLE (Epilachna varivestis Muls.)

Maine. J. H. Hawkins (August 16): Continuing to spread. In central Maine second-generation adults were found in many fields of beans grown for the dry-bean industry. Damage not extensive, except in the southwestern part of the State.

Connecticut. N. Turner (August 22): Second-generation larvae feeding on garden beans. Damage severe on untreated plantings.

New York. N. Y. State Coll. Agr. News Letter (August 1): For the first time in the history of the State, beans are threatened with serious injury, at least in the counties on the southern and western borders. First generation is now preponderantly in the pupal stage in most counties, but in Erie and other lake counties the insect is mostly in the first-generation adult stage. Serious injury is threatened in fields where a spotted or general infestation of first-brood larvae occurred and where no control measures were applied. (August 8): In the field-bean area (Steuben, Schuyler, Allegany, Livingston Counties)

the insect is largely in the adult stage, many eggs now being deposited. In Erie County the insect is about 5 days ahead of the "higher altitude" counties and larvae of the second brood are active.

New Jersey. H. W. Allen (August 22): Nearly complete defoliation of beans noted in a number of fields in the western part of Burlington County on August 21.

E. Kostal (August 15): Abundant and destructive on lima and string beans at Morganville, Monmouth County.

Virginia. H. G. Walker (August): Has been very abundant in many fields of beans and has seriously injured a great many plantings of beans in eastern Virginia, where not properly controlled.

North Carolina. W. A. Thomas (August 15): This insect has been unusually destructive to beans, cowpeas, and soybeans in the vicinity of Chadbourne, Columbus County, in the southern part of the State. The attack has been more disastrous to beans, mostly limas, than to the other crops.

M. D. Leonard (August 1): A patch of several acres of large plants with considerable foliage injured at Enfield, Halifax County, in the northeastern part of the State.

South Carolina. F. Sherman (August 22): Now more destructive at Clemson than is usual at this season.

J. G. Watts (August): Considerable damage is being done to beans in home gardens at Blackville.

Georgia. O. I. Snapp (August 14): Has utterly destroyed a crop of lima beans at Greenville, central Georgia.

T. L. Bissell (August 22): Adults and young are noticeable on soybeans and cowpeas. Also reported on a field of young lima beans.

Florida. A. N. Tissot (August 23): Infestation at Havana, Gadsden County, continuing to develop. Insects apparently becoming more numerous.

Tennessee. G. M. Bentley (August 23): Reports of damaging beans and peas in Davidson, DeKalb, Sumner, Warren, and Weakley Counties. Damage at this time heavier than earlier in the season. Approximately 100 percent of the leaves of lima beans punctured in Weakley County.

Ohio. N. F. Howard (August): Numerous and injurious in the Columbus area. In most gardens beans are defoliated unless control measures had been taken.

R. H. Nelson (August 15): First adult specimens of second-generation beetles noted near South Point, Lawrence County, in the southeastern part of the State, on August 15. Infestations general in the South Point area during August and untreated plantings severely injured.

G. A. Runner (August 23): Abundant on beans locally in the Sandusky area, northern Ohio.

Indiana. J. J. Davis (August 24): Continues to be very abundant throughout

the State.

Kentucky. W. A. Price (August 24): More active and numerous this season than usual.

Missouri. L. Haseman (August 24): In southeastern Missouri it has extended its western spread over the first two to four tiers of counties and has caused serious damage to garden plantings of beans as far west as Poplar Bluff.

Mississippi. C. Lyle (August 24): Infestations reported as follows: on August 21, stripping vegetable beans over Monroe County; on August 22, heavy infestation in Lauderdale, Jasper, and Newton Counties; on August 20, severe injury to beans at West Point, Clay County. Heavy damage in Chickasaw and Scott Counties. Reported on August 24 from Lafayette County for the first time.

Utah. G. F. Knowlton (August 1): Damaging beans at Castleton, Moab, Green River, and Huntington, all in eastern Utah.

A WEEVIL (Hypera meles F.)

New York. N. Y. State Coll. Agr. News Letter (August 1): In Livingston County, western New York, this weevil was observed destroying field beans growing adjacent to a barn in which clover hay had been placed recently. Injury was progressively less away from the barn and was absent 50 yards away. Plants near the barn contained from 10 to 50 weevils. During the last 3 weeks the clover-head weevil has been unusually abundant about barns in which hay has been stored.

COTTON-SQUARE BORER (Strymon melinus Hbn.)

Utah. G. F. Knowlton (August 6): Collected at Spanish Fork, north-central Utah. Reported as damaging pole beans in that vicinity. (Det. by C. Heinrich.)

BEAN APHID (Aphis rumicis L.)

New York. N. Y. State Coll. Agr. News Letter (August 1): Reported to be abundant in some fields of lima beans in Livingston County, western New York.

PEAS

PEA MOTH (Laspeyresia nigricana Steph.)

Maine. G. W. Simpson (August 1): About 30 percent of the pods of peas in a home garden at Presque Isle, northeastern Maine, were infested.

A MITE (Penthaleus major Duges)

California. E. O. Essig (August 11): This species was first taken by the writer on March 17, 1922, near San Jose, where it was attacking the springtail, Achorutes armatus Nicolet, swarming on the surface of fresh water in a drainage ditch. Specimens were sent to H. E. Ewing, who identified them as Penthaleus sp. Shortly afterwards in the same month, L. R. Cody called my attention to injuries to peas growing along the foothills near Warm Springs, Alameda County, by what appeared to be this species. The damage was considerable, but was restricted and for only a short time. A similar infestation recurred the following year, but has not been observed since. A few weeks ago, I received a small lot of the same species which had recently been collected by A. J. Nicholson at Riverside. A mounted slide of the mite was sent to H. Womersley, Adelaide, Australia. A letter from Mr. Womersley, dated July 13, 1938, says that the species is identical with the pea mite of that country, P. major.

CABBAGE

IMPORTED CABBAGE WORM (Pieris rapae L.)

New York. N. Y. State Coll. Agr. News Letter (August 15): Considerable damage to cabbage in eastern New York; heavy flights of moths present.

Indiana. G. E. Gould (August 25): Abundant in the northern part of the State, causing considerable damage to cabbage.

Missouri. L. Haseman (August 24): Butterflies very abundant in fields and gardens.

Utah. G. F. Knowlton (August 10): Butterflies are abundant at Brigham and Ogden, in northern Utah. Injury is common wherever control has not been effected.

CABBAGE LOOPER (Autographica brassicae Riley)

New York. N. Y. State Coll. Agr. News Letter (August 22): Larvae less numerous in western New York than early in August. A few looper eggs found in Wayne County.

Indiana. G. E. Gould (August 25): Abundant in the northern half of the State.

Utah. G. F. Knowlton (August 13): Nine moths taken in light trap at Logan, north-central Utah, on the night of August 12.

A WEEVIL (Ceutorhynchus assimilis Payk.)

Washington. M. J. Forsell (August 18): During 1938 these weevils have been scarce and have heard no complaints of damage in the fields.

HARLEQUIN BUG (Murgantia histrionica Hahn)

Virginia. H. G. Walker (August): Rather abundant and seriously injuring cabbage at Drakes Branch, south-central Virginia. However, this insect is rather scarce and has caused practically no injury in the Norfolk area.

South Carolina. W. C. Nettles (August 22): Apparently above average at Clemson.

J. G. Watts (August 20): Collards in a number of home gardens at Williston, in the southwestern part of the State, are heavily infested.

Ohio. R. H. Nelson (August 15): Adults common and causing injury to late turnips. No nymphs found, but egg masses present.

Indiana. J. J. Davis (August 24): Reported on August 10 as very destructive to cabbage at Pekin, in the southern part of the State.

Kentucky. W. A. Price (August 24): Bugs did some damage to crops in the vicinity of Lawrenceburg, Anderson County.

SQUASH

SQUASH BUG (Anasa tristis Deg.)

Maine. J. H. Hawkins (August 16): Steadily increasing at Monmouth and moving northward and eastward from the southern part of the State.

Connecticut. N. Turner (August 22): Abundance much less, as compared with the average year.

New York. N. Y. State Coll. Agr. News Letter (August 22): In eastern New York squash bugs are reported damaging squash.

South Carolina. J. G. Watts (August 20): This insect is scarce on a planting of fall cucumbers at Blackville.

Florida. A. N. Tissot (August 23): Reported as being very abundant on summer squash at Hawthorne, eastern Alachua County.

Indiana. J. J. Davis (August 24): Abundant during August in central Indiana.

Iowa. C. J. Drake (August 22): Reported damaging squash at Corydon, Des Moines, and Ames, in central Iowa; What Cheer, in southeastern Iowa; and Palo, in east-central Iowa.

Missouri. L. Haseman (August 24): Adults and eggs less abundant during the latter half of the month but partly grown nymphs now very abundant on squash and related crops that have not been protected throughout central Missouri.

Nebraska. M. H. Swenk (August 23): Complaints of damage to squash, pumpkin, and cucumber vines received from Richardson, Douglas, Saline, Custer, and Thomas Counties from July 21 to August 20.

Oklahoma. F. A. Fenton (August 20): Present at Perry, Noble County, in north-central Oklahoma.

Utah. G. F. Knowlton (August 17): Damage to cantaloups and squash reported from Farmington. (August 1): Reported as seriously damaging water-melons and cantaloups at Moab.

SQUASH BORER (Melittia satyriniformis Hbn.)

Connecticut. N. Turner (August 22): Early summer squash killed at Mt. Carmel farm. Abundant in other parts of the State.

New York. N. Y. State Coll. Agr. News Letter (August 8): Reported on squash on Long Island. (August 15): Injury continues to show in Wayne County, western New York, and larvae appeared to be approaching maturity from August 2 to 8.

Pennsylvania. H. E. Hodgkiss (August 25): Borer very abundant throughout the State.

Ohio. G. A. Runner (August 23): Destructive in a number of localities.

Tennessee. G. M. Bentley (August 23): Reported on squash in Davidson County on August 3.

Nebraska. M. H. Swenk (August 23): Reported as injuring squash vines in Colfax County, east-central Nebraska, on August 10.

SQUASH BEETLE (Epilachna borealis F.)

Pennsylvania. H. E. Hodgkiss (August 25): Squash ladybird beetle moderately abundant in the northeastern counties.

CUCURBITS

PICKLE WORMS (Diaphania spp.)

South Carolina. J. G. Watts (August): A small planting of late summer cantaloups was completely destroyed by the melon worm (D. hyalinata L.). A few larvae are beginning to appear in the fall crop. One moth was taken at the light trap August 22. Reported from Blackville.

Indiana. J. J. Davis (August 24): Pickle worm (D. nitidalis Stoll) reported on August 15 and 17 as being destructive to pickles in east-central and northern Indiana.

G. E. Gould (August 25): For the second year, the pickle worm is infesting a serious number of the pickling cucumbers in northern Indiana. One large company forced to hire extra help to pick out wormy

cucumbers, and 600 wormy cucumbers detected in a week, over 100 of their 480 growers having brought in wormy cucumbers.

Mississippi. C. Lyle (August 24): Pickle worms reported on August 20 as being unusually bad in Grenada County, north-central Mississippi, destroying most of the late cantaloups.

MELON APHID (Aphis gossypii Glov.)

Indiana. J. J. Davis (August 24): Abundant and destructive generally throughout the State.

Minnesota. C. E. Mickel (August): Melon louse abundant in the vicinity of Saint Paul and Minneapolis.

Kansas. H. R. Bryson (August 25): Reported as destructive this year. Vines in some melon patches killed. Injury not confined to cucumbers and melons alone, but squash and pumpkins also damaged considerably.

Nebraska. M. H. Swenk (August 23): The melon aphid is damaging muskmelons, watermelons, and cucumbers in Douglas, Burt, Saline, Antelope, and Furness Counties.

Utah. G. F. Knowlton and F. C. Harmston (August 24): Cantaloup vines being destroyed at Green River, east-central Utah.

ASPARAGUS

ASPARAGUS BEETLE (Crioceris asparagi L.)

North Carolina. C. S. Brimley (August 22): Infesting an asparagus bed at Thomasville. Damage severe.

South Carolina. J. G. Watts (August): During the first half of the month this insect continued to be very destructive, but since that time the population and injury has decreased considerably. Most fields in the asparagus-growing section of the State that have not been poisoned have been severely damaged. Crowns and young plants have been more seriously affected than older plants.

Utah. G. F. Knowlton (August 22): All stages found during the early part of August in several infested fields in Weber and Davis Counties.

Washington. E. J. Newcomer (August): Very common in the Yakima Valley.

TURNIP

TURNIP APHID (Rhopalosiphum pseudobrassicæ Davis)

Ohio. G. A. Runner (August 23): Abundance of turnip aphids making it difficult to obtain satisfactory stands of turnips in some localities.

EGGPLANT

EGGPLANT LACEBUG (Gargaphia solani Heid.)

North Carolina. W. A. Thomas (August 19): Attacking eggplant in the vicinity of Tabor City. The insects were extremely abundant, some affected leaves having more than 50 specimens grouped together on their under surfaces.

ONIONS

ONION THRIPS (Thrips tabaci Lind.)

Colorado. C. R. Jones (August 1): More abundant on onions than for years and considerable damage being done.

PEANUTS

POTATO LEAFHOPPER (Emboasca fabae Harr.)

North Carolina. M. D. Leonard (August 1): Owing to continued rains, leafhopper damage on peanuts has been light, although many fields examined during the latter half of July in the six or seven heaviest peanut-growing counties in the northeastern part of the State showed a few leafhoppers present.

LETTUCE

A HORNWORM (Celerio gallii Rott.)

Maine. J. H. Hawkins (August 16): Taken in quantity as larvae from lettuce and other vegetables in Brewer, Penobscot County. Never before to my knowledge found in such large numbers in Maine.

STRAWBERRY

STRAWBERRY CROWN BORER (Tyloderma fragariae Riley)

Indiana. J. J. Davis (August 24): Destructive in several localities in the southern third of the State and present in the southern two-thirds.

STRAWBERRY ROOT APHID (Aphis forbesi Weed)

Virginia. H. G. Walker (August): Abundant and has caused much damage in a number of strawberry fields near Norfolk.

Kentucky. W. A. Price (August 10): Attacking 13 percent of the strawberry plants examined in one patch at Princeton.

PEPPER

PEPPER WEEVIL (Anthonomus eugenii Cano)

California. J. C. Elmore (August 17): Causing serious damage to the chili peppers in some places in Orange and Los Angeles Counties. Infestations range from 2 to 50 percent in a single field. A field of bell peppers was 100 percent infested at Yorba Linda, on August 6.

C O T T O N I N S E C T S

BOLL WEEVIL (Anthonomus grandis Boh.)

North Carolina. C. H. Brannon (August 20): Infestation in Edgecombe and adjacent counties reported as very severe on August 8.

South Carolina. F. Sherman and W. C. Nettles (August 22): There has been a marked increase of boll weevil over the whole State during August.

J. G. Watts (August): An unusually bad year for boll weevils at Blackville. Many fields not treated have only a fourth of a crop.

F. F. Bondy and C. F. Rainwater (August 27): By August 8 migrating weevils had almost covered cotton in Florence County, infestations being practically 100 percent, the worst since 1929 and 1930. Now very numerous and damaging late bolls.

Georgia. O. I. Snapp (August 19): Abundant in the vicinity of Fort Valley owing to favorable weather conditions. Considerable damage.

P. M. Gilmer and P. A. Glick (August 28): Migration was at its peak during the first week of August in Tift, Lowndes, Berrien, Cook, and Colquitt Counties, Upper Coastal Plain. Damage was serious and third-brood weevils fairly numerous.

Florida. L. C. Fife and C. S. Rude (August 27): Infestation very high the second week in August after migration had started in Alachua, Marion, and Gilchrist Counties. Infestation in Lake County was very light. At present all counties but Lake are highly infested, from 65 to 99 percent.

Mississippi. State Plant Board (August 15): Heaviest infestations in many years now present in most sections of Mississippi, especially the Delta. General migration of weevils in progress, and fields of late cotton reported to be full of weevils despite control measures.

C. Lyle (August 24): Infestation the heaviest in many years and late cotton being severely damaged in most cases. Delta counties, especially, very heavily infested and control measures rather general.

R. L. McGarr, et al. (August 27): By August 13 in Oktibbeha, Lowndes, and Noxubee Counties infestation had increased greatly. Average infestation was 52.8 percent as compared with 19.2 percent in 1937. Yield expected to be cut 50 percent or more.

E. W. Dunnam, et al. (August 27): Boll weevils at least 10 times as numerous as last season at this date in Washington County. Infestation practically 100 percent in all fields.

Louisiana. R. C. Gaines and assistants (August 20): Average of punctured squares in untreated check plots was 91.5 percent this week. Population heavy in all of the fields of Madison Parish, especially in young cotton.

Arkansas. D. Isely (August 23): Generally distributed over the State except in the northeastern part. While damage greater than in any year since 1932, extreme injury did not materialize owing to drought.

Oklahoma. C. F. Stiles (August 31): Infestation has increased very rapidly throughout the southeastern quarter of the State, and little top crop cotton expected to be produced this season throughout that area. Weevils more numerous this season in southeastern Oklahoma than since 1935, and perhaps worse than since 1933.

E. E. Ivy (August 21): Infestation has increased steadily in McCurtain County and is now at between 70 and 80 percent in all fields examined. Forty percent of the bolls have one or more eggs, larvae, or pupae in them, and between 10 and 15 percent of the locks have been destroyed.

Texas. F. L. Thomas (August 12): Weevils spotted but most abundant in the lowlands of central and northern Texas. Less damage now in Calhoun County, but more in the Lavaca River bottoms of Jackson County, (August 26): Abundant in most fields of young cotton and causing damage in the lowlands of Concho, Jones, McCulloch, and Taylor Counties, west-central Texas.

K. P. Ewing, et al. (August 6): Average of punctured squares observed to be 20.9 percent as compared to 12.2 percent last week in Calhoun and Jackson Counties. Severe damage in some fields, light to medium in all others inspected was observed in the vicinity of Waco and in the Brazos River bottom.

A. J. Chapman (August 20): Average infestation in 10 fields above the mouth of the Conchos and 8 below was found to be 59.66 percent. (August 27): Average infestation in 22 fields inspected was found to be 87.54 percent.

R. W. Moreland, et al. (August 6): In Brazos and Burleson Counties average infestation in check plots found to be 58.8 percent compared to 62.9 percent on August 8, 1936.

COTTON LEAF WORM (Alabama argillacea Hbn.)

South Carolina. F. F. Bondy and C. F. Rainwater (August 27): Adults but no larvae of cotton leaf worm found during the last 2 weeks in Florence County.

Tennessee. G. M. Bentley (August 23): Reported on August 19 and 20 as occurring in Madison, Fayette, Dyer, Gibson, Lauderdale, and Shelby Counties. Farmers using control measures. Approximately 10 percent of leaves destroyed at Trimble, Dyer County.

Mississippi. C. Lyle (August 24): Found generally over the 10 northwestern counties. Scattered throughout north-central Mississippi, but little damage noted. Causing considerable damage in several of the northeastern counties and in Itawamba County, fully 25 percent of the foliage being stripped in some fields. Spotted infestations in the vicinity of State College, with foliage ragged considerably in some fields.

R. L. McGarr, et al. (August 27): Observed in sufficient numbers to cause some ragging of cotton in Oktibbeha and Lowndes Counties.

E. W. Dunnam, et al. (August 6): Present in most fields in Washington County. First moth noted here was bred from larvae collected on July 25, which emerged on August 4. (August 20): Insect ragging cotton in some places but damage most serious in young cotton. (August 27): Stripping cotton in many fields, doing much more damage within the last few days.

Louisiana. B. A. Osterberger and E. R. Lett (August 8): Second generation just appearing at Merryville, Beauregard Parish. No serious damage from first generation in this section.

W. F. Turner (August 27): Infestations observed north of Bossier City, Bossier Parish. Spread increased, but not the severity, to the end of the bottom lands, just south of Benton. No fields completely stripped.

R. C. Gaines and assistants (August 13): Still present in fields in Madison Parish but not in sufficient numbers to cause ragging. (August 20): Leaf worms may be found in small numbers in most fields. Ragging may be noticed in some fields of young cotton.

M. T. Young and assistants (August 27): Found in practically all fields observed in Madison Parish but not in sufficient numbers to cause damage.

Arkansas. D. Isely (August 22): Generally distributed over Arkansas for the last month but no general injury occurring. Some local injury and local control measures.

Oklahoma. C. F. Stiles (August 31): Now present throughout practically all the cotton-producing areas of Oklahoma and numerous fields being defoliated.

E. E. Ivy (August 21): First found in the Red River bottom on July 24, and showed evidences of having been present for 2 or 3 weeks. Scattered, light infestations found all over this region in McCurtain County shortly after that, a few of the earlier infestations causing considerable injury, practically stripping the leaves in many of the fields. No further injury noted for a period of a week or 10 days, but now all infestations apparently spreading rapidly and many new ones observed.

Texas. F. L. Thomas (August 5): Fourth generation now active, causing damage as far north as central Texas. Scattered as yet in northern and northwestern Texas. (August 12): Control measures under way in southern Texas; extensive in the San Antonio area; general throughout central Texas; and just beginning in northern Texas. (August 26): Some injury observed on late-planted cotton in central Texas, but control measures being much less used.

H. S. Cavitt (July 30): Some poisoning being done in the vicinity of Candelaria. Causing some damage to young cotton at the lower end of the Presidio Valley around Redford.

K. P. Ewing, et al. (August 6): General throughout the Waco and Brazos River area of Calhoun and Jackson Counties, and more actual damage and stripping of plants observed around Waco than at any other point this year.

A. J. Chapman (August 27): Defoliation throughout August by leaf worms, as well as lack of water, has contributed to an earlier than usual maturity of the crop in the Presidio area.

R. W. Moreland, et al. (August 6): Considerable control work being done during the week in Brazos and Burleson Counties. (August 20): Some leaf worms still in the cotton.

Arizona. W. A. Stevenson (July 30): One small larva found at Sahuarita, Pima County, on July 28. (August 20): Further specimens found in the Sahuarita area but infestation still low.

BOLLWORM (Heliothis obsoleta F.)

South Carolina. F. F. Bondy and C. F. Rainwater (August 27): Bollworms observed on cotton in Florence County throughout August but no damage done.

Georgia. P. M. Gilmer and P. A. Glick (August 7): Considerable damage in fields near corn in Tift, Lowndes, Berrien, Cook, and Colquitt Counties. (August 28): Slight damage by large larvae in the Upper Coastal Plain. Little damage to dusted cotton.

Florida. A. N. Tissot (August 23): Doing some damage to cotton in Bonifay, Holmes County.

L. C. Fife and C. S. Rude (August 20): Doing a good deal of damage in some fields in Lake, Alachua, Marion, and Gilchrist Counties. (August 27): Present in all fields to some extent but not serious in most.

Mississippi. R. L. McGarr, et al. (August 6): No appreciable number of bollworms noted in Oktibbeha and Lowndes Counties.

E. W. Dunnam, et al. (August 27): A few bollworms found all month but no damage reported in Washington County.

Oklahoma. E. E. Ivy (August 21): Very numerous recently in McCurtain County, especially in younger cotton near corn, the infestation running to 20 or 30 percent in some fields, and averaging more than 5 percent.

Texas. F. L. Thomas (August 12): Second-generation bollworms threatening damage to young cotton in the Brazos Valley of central Texas. Severe damage caused by the first generation in some fields near Waco, with light to moderate damage found in all fields inspected. (August 26): Damage caused in the lowlands of Concho, Jones, McCulloch, and Taylor Counties. Severe damage reported from Kent County.

H. S. Cavitt (July 30): Considerable damage done in the lower end of the Presidio Valley, around Redford.

K. P. Ewing, et al. (August 6): Damage from bollworm apparently on the decline in Calhoun and Jackson Counties. Severe damage found in the vicinity of Waco, with light to medium damage in all other fields inspected. Damage reported also from the Brazos River bottom and the black land section. (August 20): Bollworms have practically ceased their activity except in a few fields of June-planted cotton.

A. J. Chapman (August 13): Reduction in bolls per plant due largely to the cotton bollworm. (August 20): Counts in fields above the Conchos indicate less damage than in the Presidio area. (August 27): Considerable damage done to the crop.

R. W. Moreland, et al. (August 13): Peak of oviposition for second brood occurred about the first of the week in check plots in Brazos and Burleson Counties. (August 20): Average of 7.7 eggs per 100 tops found as compared with 28.5 eggs per 100 tops 2 weeks ago.

Arizona. W. A. Stevenson (July 30): Very heavy outbreak observed in a field of late-planted Pima cotton in the Marana section, Pima County, the first part of the week. Feeding principally on the squares, with some bud feeding noted. Infestation general over the field and probably commercial damage will be caused. Infestation general in the Marana and Sahuarita sections but not so severe as in the first field mentioned. (August 6): Infestation in the Tucson district practically cleared up.

PINK BOLLWORM (Pectinophora gossypiella Saund.)

Texas. R. E. McDonald (July and August): Toward the close of July pink bollworm was found in Kleberg County, this being the first specimen ever found in that section. Specimens have since been found in Brooks, Jim Wells, and Nueces Counties. Only a few worms found, indicating that the infestation is very light.

A. J. Chapman (August 13): Infestation counts made in 20 fields located in the Presidio and Redford area. Average infestation was 45.5 percent.

COTTON FLEA HOPPER (Psallus scriatus Reut.)

South Carolina. F. F. Bondy and C. F. Rainwater (August 27): A few observed throughout the month but no damage found in Florence County.

Georgia. P. M. Gilmer and P. A. Glick (August 28): Present in some numbers from slightly south of Cordelo northward on the Upper Coastal Plain. No serious damage.

Mississippi. R. L. McGarr (July 30): Very few on cotton in Oktibbeha and Lowndes Counties.

Oklahoma. E. E. Ivy (August 21): Approximately the same degree of infestation maintained in McCurtain County, from 5 to 10 percent, all season, and blasted squares found in considerable numbers.

Texas. F. L. Thomas (August 5): Present in northwestern Texas, and increasing since the middle of July in Dickens and Wilbarger Counties.

R. W. Moreland, et al. (August 20): Few found in old cotton but population in young cotton fairly heavy since August 1. Population in late-planted cotton lighter than last week, but still causing some injury.

RAPID PLANT BUG (Adelphocoris rapidus Say)

South Carolina. F. F. Bondy and C. F. Rainwater (August 13): Nymphs numerous in several fields in Florence County.

Mississippi. R. L. McGarr (July 30): A few bugs noted in Oktibbeha and Lowndes Counties.

Texas. R. K. Fletcher (August 13): An average of 25 per 100 plants found on young cotton in Brazos and Burleson Counties. (August 20): One count in young cotton showed as many as 70 nymphs and 43 adults per 100 plants. (August 22): Some fields in the Brazos River bottoms found heavily infested. Most of the nymphs were on small bolls while adults were generally distributed over the plants, showing a preference for the blooms. Also found on field peas in one place.

COTTON STAINER (Dysdercus suturellus H. S.)

Florida. A. N. Tissot (August 23): A great deal of damage caused on Sea Island cotton at Melbourne. Insect reported to be doing injury to cotton in other parts of the State.

L. C. Fife and C. S. Rude (August 13): Cotton stainer showing up in the lower part of Lake County.

LEAF APHIDS (Aphididae)

South Carolina. F. F. Bondy and C. F. Rainwater (August 27): Numerous in most dusted fields, and causing the shedding of leaves at the bottoms of the plants in Florence County.

Georgia. P. M. Gilmer and P. A. Glick (August 28): Aphids increasing in the Upper Coastal Plain. Some damage to lint in Sea Island cotton likely to occur.

Florida. L. C. Fife and C. S. Rude (August 27): Aphids have built up in the last 2 weeks, especially in fields that have been heavily dusted. Parasites, present in large numbers 3 weeks ago, seem to have disappeared.

Mississippi. C. Lyle (August 24): Infestations of cotton aphid (Aphis gossypii Glov.) heavier this season than for several years owing to control measures for the boll weevil.

Louisiana. C. O. Eddy (August): Unusually abundant on cotton this year, probably owing to such intensive control measures for boll weevil.

M. T. Young and assistants (August 27): Heavy in treated fields and found in greater numbers than usual in untreated fields in Madison Parish.

Oklahoma. E. E. Ivy (August 21): Abundant on cotton all summer in McCurtain County but not much damage apparent.

Texas. F. L. Thomas (August 19): Plants in the greater part of Lubbock County literally covered with plant lice and the resultant honeydew. Leaves are curling and the squares beginning to shed. (August 26): Present in all fields of central Texas where control measures used for boll weevil. Infestation much heavier in some fields than in others, and staining of lint quite likely to occur.

K. P. Ewing, et al. (August 20): Damage continued and easily seen in fields in Calhoun and Jackson Counties, as heavily infested plants have lost their green color in comparison with more lightly infested ones.

Arizona. W. A. Stevenson (July 30): Infestation in Pima County has practically cleared up, owing principally to parasites, but somewhat to predators.

COMMON RED SPIDER (Tetranychus telarius L.)

Virginia. H. G. Walker (August 10): Part of a field of cotton near Whaleyville reported as being rather heavily infested.

South Carolina. F. F. Bondy and C. F. Rainwater (August 6): Local infestations in Florence County have disappeared. (August 20): A small infestation found in a field of late cotton.

Louisiana. R. C. Gaines and assistants (August 20): A few red spiders observed in cotton fields in Madison Parish.

F O R E S T A N D S H A D E - T R E E I N S E C T S

FALL WEBWORMS (Hyphantria spp.)

- Maine. F. H. Lathrop (August 15): Nests conspicuous on trees and shrubs along the roadsides from central Maine southward. Many unsprayed apple trees infested. Much more in evidence than at any time during the last 4 or 5 years.
- Vermont. H. L. Bailey (August 27): More than usual numbers of fall webworms in all parts of the State.
- Massachusetts. A. I. Bourne (August 24): This pest, ordinarily conspicuous at this time of year, is comparatively scarce.
- Connecticut. N. Turnor (August 22): An occasional nest seen along roadsides in the central part of the State.
- New Jersey. E. Kostal (August 15): More abundant than usual on apple and pear at Morganville. Damage moderate.
- North Carolina. R. J. Kowal (August 20): Pest observed as apparently confined to sourwood (Oxydendrum arboreum) in Morrow Mountain State Park. Majority of trees, especially along roadsides, almost completely defoliated. Defoliation apparently most severe at elevations between 600-800 feet.
- Florida. A. N. Tissot (August 23): Insect apparently on the increase. Reported as doing injury to pecans and hickories at Leesburg, and injury rather general on pecans between Gainesville and Jacksonville.
- Ohio. E. W. Mendenhall (August 22): Noticeable on apple and forest trees generally.
- G. A. Runner (August 23): Practically all willows in marl beds covering a wide area near Castalia, north-central Ohio, contain numerous colonies.
- Kentucky. W. A. Price (August 24): Numerous at Richmond and Lexington.
- Tennessee. G. M. Bentley (August 23): Reported on August 19 as infesting a few sumac plants at McMinnville, Warren County.
- Mississippi. C. Lyle (August 24): Reported as generally scattered over the Grenada district, north-central Mississippi, but no damage of importance done.
- Texas. C. B. Nickels (July 24): Webs on pecan and black walnut more abundant at Mason, central Texas, and at Boerne and Fredericksburg, south-central Texas, than in any other season during the last 5 years. Several webs could be collected from a single small tree.

FOREST TENT CATERPILLAR (Malacosoma disstria Hbn.)

Vermont and Massachusetts. A. F. Burgess (July and August): Killing of a large number of red oaks, defoliated this year for the third time, reported from Vermont. Many trees not refooliating and apparently dead. Considerable number of pupae in a Massachusetts area found to be opened during the first week in July and a high percentage found dead or containing a maggot of a tachinid parasite.

New England and New York. E. P. Felt (August 23): Damage still generally evident on sugar maples in northwestern Connecticut, western Massachusetts, southern New Hampshire, Vermont, and in adjacent areas in New York, also in the Mohawk Valley. A large proportion of the stripped trees in many communities and extensive areas of woodland seriously injured by the outbreak of last spring.

GYPSY MOTH (Porthetria dispar L.)

New England. A. F. Burgess (July and August): Infestation throughout most sections of the New England infested area less than last year. Little or no stripping apparent this season in the Framingham, Mass., district, where many acres were defoliated last year. Many of the new egg clusters much smaller than those noted last year. A large decrease in infestation in the Cape Cod section of Massachusetts. No intense infestation in Greenfield, Mass., section, as in 1937. Several areas heavily defoliated in towns of Hingham and South Weymouth, Mass. Severe outbreak, accompanied by extreme stripping, reported from two sections of Connecticut.

SATIN MOTH (Stilpnotia salicis L.)

New Hampshire. J. V. Schaffner, Jr. (July 25): A rather heavy flight of moths occurred in the vicinity of Plymouth during the night of July 25. Hundreds of the moths clustered on electric light poles in the business section of the town.

A HEMLOCK LOOPER (Ellopiella fiskei Hulst)

Idaho. J. C. Evenden (August): The hemlock looper, which in 1937 appeared in epidemic form throughout northern Idaho and western Montana, is again defoliating large forest areas. A marked decline in the severity of this season's infestation is apparent and the epidemic in general is believed to be decreasing. Large percentage of overwintering eggs parasitized.

CECROPIA MOTH (Platysamia cecropia L.)

Indiana. J. J. Davis (August 24): Reported as abundant on cherry at Tipton on August 8. Many specimens sent in from all sections of the northern half of the State during the last month, but in most cases simply because of their unusual appearance.

BAGWORM (Thyridopteryx ephemeraeformis Haw.)

New York. M. Kisliuk, Jr. (August 15): Late in July and early in August evergreens, poplars, maples, and locusts observed as completely defoliated. Many reports of damage received from Long Island.

New Jersey. H. W. Allen (August 22): Defoliation of sycamore, in some cases nearly 100 percent, noted on street shade trees in Burlington County.

Georgia. O. I. Snapp (August 9): Unusually abundant on evergreen trees at Fort Valley, central Georgia.

W. H. Clarke (August 10): More abundant than in several years.

Ohio. T. H. Parks (August 20): Quite injurious to ornamental plantings throughout the southern half of the State.

Indiana. J. J. Davis (August 24): Reported on August 19 as defoliating pino at Scottsburg, southeastern Indiana.

Kentucky. W. A. Price (August 24); Common in many sections of the State.

Tennessee. G. M. Bentley (August 23): Noticed on arborvitae and juniper in a nursery at McMinnville, Warren County, on July 27.

Mississippi. C. Lyle (August 24): Reported in various sections of the State as abundant on arborvitae and cedar.

Louisiana. C. O. Eddy (August): Reported from a number of sections of Louisiana as being very abundant.

Oklahoma. F. A. Fenton (August 20): Reported in El Reno, Canadian County, west-central Oklahoma.

Texas. R. K. Fletcher (August 22): Injury to evergreens reported from several points in northeastern Texas.

ASH

CARPENTER WORM (Prionoxystus robiniae Peck)

Minnesota. A. G. Ruggles and assistants (August): Abundant on green ash at Fairmont and all along the western border of the State.

Nebraska. M. H. Swenk (August 23): Reported as attacking elm, ash, and hackberry trees in Sheridan County, northwestern Nebraska, on July 23.

BIRCH

BRONZED BIRCH BORER (Agrilus anxius Gory)

Ohio. E. W. Mendenhall (August 15): Killing birch trees in Columbus.

Iowa. C. J. Drake (August 22): Destroying large numbers of cutleaf birch in Des Moines.

BIRCH LEAF MINER (Fenusa pumila Klug)

Vermont. H. L. Bailey (August 27): Reported as plentiful at Dorset, Bennington County, southeastern Vermont.

New England and New York. E. P. Felt (August 23): Generally prevalent over much of southern New England and adjacent areas in New York State.

BOXELDER

BOXELDER BUG (Leptocoris trivittatus Say)

Virginia. W. S. Hough (August 25): Found in great numbers wherever there are boxelder trees around Winchester. Numerous complaints received that the bugs are entering houses and causing home owners much concern.

Indiana. J. J. Davis (August 24): Abundant during the last month in several localities in the northwestern quarter of the State.

A LEAF ROLLER (Cacoecia semiferana Walk.)

Colorado. C. R. Jones (August 1): Boxelder leaf roller more prevalent throughout the State than for years. Practically all boxelder trees completely defoliated.

CATALPA

CATALPA SPHINX (Ceratonia catalpae Bdv.)

Maryland. Gertrude Myers (August 24): Catalpa trees along Avery Road, 3 miles east of Rockville, being defoliated.

Ohio. T. H. Parks (August 20): Heavy defoliation reported from ornamental plantings in cities throughout the State.

Mississippi. C. Lyle (August 24): On August 20 several catalpa trees in Grenada County, north-central Mississippi, were observed to be defoliated.

ELM

ELM LEAF BEETLE (Galerucella xanthomelaena Schr.)

New England and New York. J. V. Schaffner, Jr. (August 18): Abundant and causing considerable injury to elms, particularly in residential areas, in many localities throughout New England and New York.

Massachusetts. A. I. Bourne (August 24): Causing considerable damage, especially in towns in the eastern part of the State.

New Jersey. C. W. Collins (August 20): Noticeable injury observed in the following towns: Chatham, Morristown, Florham Park, Hanover, Whippany, Pluckomin, Parsippany, and Madison.

Virginia. L. D. Anderson and H. G. Walker (August): Rather abundant on elms in some plantings near Norfolk.

L. G. Baumhofer (July 22): Destroyed a high percentage of the foliage on the elm trees in the city park at Luray. On July 22 the insect was mostly in the adult and pupal stages.

Ohio. E. W. Mendenhall (August 20): Severe injury in certain localities in Columbus. Second brood working now. (August 25): Found at Delaware, north-central Ohio, infesting American elm. Leaves entirely laced. First record of infestation at Delaware.

Indiana. J. J. Davis (August 24): Specimens received from a number of localities in the southern half of Indiana, and observed to be definitely increasing during the last few years.

Kentucky. W. A. Price (August 24): Reported as doing much damage in the vicinity of Lexington early in August.

ELM SAWFLY (Cimbex americana Leach)

Michigan. R. Hutson (August 22): Collected on elm at Lake City, in the northern part of the Lower Peninsula, on August 3.

ELM LACEBUG (Corythucha ulmi O. & D.)

Connecticut and New York. E. P. Felt (August 23): Damage severe on trees growing in weedy or brushy areas in western Connecticut and eastern New York.

LARCH

LARCH SAWFLY (Lygacnematus erichsonii Htg.)

Montana. J. C. Evenden (August 13): Insect recorded from the North Fork of the Flathead River, north of Columbia Falls, in 1934. An infestation at Walton, northwestern Montana, some 60 miles to the south, was first recorded this season.

A SAWFLY (Platycampus larivicornis Rohw. & Midd.)

Idaho. J. C. Evenden (August 22): This new species was first observed in 1921, when an outbreak occurred throughout northern Idaho and western Montana. Reported on western larch at Granite, northern Idaho. First reoccurrence of the insect which has been recorded.

LOCUST

LOCUST LEAF MINER (Chalepus dorsalis Thunb.)

Maryland. J. M. Miller (July 26): Feeding on locust leaves between Kenwood and Calvert Beach, Calvert County. (Det. by H. S. Barber.)

North Carolina. B. H. Wilford (August 2): Found severely attacking black locust, mining the leaves, on ridges and upper slopes in the following northwestern counties: Buncombe, Madison, Yancey, Mitchell, Avery, and Henderson.

Tennessee. B. H. Wilford (August 20): Heavy defoliation of black locust trees reported near Tellico Plains, on the North River section of the Cherokee National Forest.

Ohio. E. W. Mendenhall (August 15): Quite serious on locust trees in southeastern Ohio counties, bordering on the Ohio River.

LOCUST TWIG BORER (Ecdytolopha insiticihana Zell.)

Arkansas. P. H. Miller (August 22): Specimens of borers found in twigs of black locust near Greenbrier, north-central Arkansas. (Det. by C. Heinrich.)

MAPLE

GOUTY VEIN GALL (Dasyneura communis Felt)

Ohio. E. W. Mendenhall (August 15): Very bad on the leaves of two hard maple trees at Belpre, Washington County, southeastern Ohio.

T. H. Parks (August 20): Specimens received from several widely separated localities. Considerable defoliation occurred in Jefferson County, eastern Ohio.

E. P. Felt (August 23): Extremely abundant near Steubenville, east-central Ohio, most of the leaves on a very large sugar maple being seriously damaged and dwarfed by the infestation.

Indiana. J. J. Davis (August 24): Reported as common at Crawfordsville and Greencastle, west-central Indiana. Adults had emerged when received on August 20.

GREEN-STRIPED MAPLE WORM (Anisota rubicunda F.)

New Hampshire. J. G. Conklin (August 29): Observed in localities throughout the southern half of the State. Red maple trees entirely defoliated in some places.

Illinois. W. P. Flint (August 24): Causing some defoliation in the northwestern part of the State. Work of insect very spotted. Almost complete defoliation of soft maples in a few localities.

Iowa. C. J. Drake (August 22): A number of hard and soft maple trees defoliated in the vicinity of Emmetsburg, northwestern Iowa, early in August.

ELM SPANWORM (Ennomos subsignarius Hbn.)

Maryland. E. N. Cory (August 1): Trees on about 2 acres at Grantsville, Garrett County, approximately 75 percent defoliated.

APHIDS (Aphididae)

North Carolina. B. H. Wilford (August 2): A maple aphid (Neoprociphilus aceris Monell) is more abundant and destructive this season than in the past at Asheville.

Ohio. G. A. Runner (August 23): Norway maple aphid (Periphyllus lyropictus Kess.) present in considerable numbers on maple but not so abundant as in previous years in the Sandusky area.

A SKELETONIZER (Epinotia aceriella Clem.)

Vermont. H. L. Bailey (August 27): Unusually abundant in Hardwick and Greensboro, Caledonia and Orleans Counties, respectively, northeastern Vermont. On some trees 75 percent of the leaves are infested.

OAK

TWIG PRUNER (Hypermallus villosus F.)

Massachusetts. A. I. Bourne (August 24): Conspicuous on oaks, along highways, but not so prevalent as during the last few years.

Michigan. R. Hutson (August 22): Damage in the form of fallen twigs observed on August 5 at Ludington, Howell, and Lansing.

ORANGE-STRIPED OAK WORM (Anisota senatoria S. & A.)

Indiana. G. E. Gould (August 25): Defoliating many oak trees in the northern half of the State.

A LEAF MINER (Lithocolletes conglomeratella Zell.)

Mississippi. C. Lyle (August 24): Damaged oak leaves received from Terry, Hinds County, west-central Mississippi.

GOLDEN OAK SCALE (Asterolecanium variolosum Ratz.)

New York. E. P. Felt (August 23): Reported as very abundant on a chestnut oak at Haverstraw, Rockland County.

A SCALE (Kermes pubescens Bogue)

Iowa. C. J. Drake (August 22): Reported from Sioux City, western Iowa, and Lamont, eastern Iowa. Apparently unusually abundant in the State this year.

PINE

WHITE-PINE WEEVIL (Pissodes strobi Peck)

Massachusetts. E. P. Felt (August 23): Injury reported from near Boston.

Connecticut. E. P. Felt (August 23): Damage reported from here and there in southwestern Connecticut.

SOUTHERN PINE BEETLE (Dendroctonus frontalis Zimm.)

Maryland, Virginia, and North Carolina. W. J. Schoene (August 23): A serious outbreak occurred during the last 12 months over a wide area extending from southern Maryland to eastern North Carolina, with heavy injury near West Point and Franklin, Va. Losses estimated very high. Extremely wet weather during June and July was unfavorable to the insect, so no spread was noted and now injury is difficult to find.

A BARK BEETLE (Pityophthorus sp.)

Massachusetts. A. I. Bourne (August 24): Specimens received from the eastern part of the State, with the report that they were causing serious injury to white pine.

NANTUCKET PINE SHOOT MOTH (Rhyacionia frustrana Comst.)

Maryland. C. A. Weigel (July 5): First observed on July 5 on mugho pine at Silver Spring and Beltsville, where it was causing almost 100-percent destruction of tips on ornamental plantings.

SPRUCE BUDWORM (Cacoccia funiferana Clem.)

Minnesota. R. H. Nagel (July 21): Common in the Minnesota-Ontario border region. About 10 square miles of jack pine on the Cut Foot Sioux Ranger District, Chippewa National Forest, heavily infested.

PANDORA MOTH (Coloradia pandora Blake)

Colorado. N. D. Wygant (August 1): A heavy flight of moths during July from the infestation on the Arapahoe National Forest observed at Granby, north-central Colorado. Moths spread over a much larger area and thousands of females were attracted to lights in the nearby towns. Eggs have not started to hatch.

PINE BARK APHID (Pineus strobi Htg.)

Ohio. E. W. Mendenhall (August 11): Found in a nursery at Gahanna, Franklin County, on white pine.

SCOTCH PINE LECANIUM (Toumeyella numismaticum P. & McD.)

Michigan. R. Hutson (August 22): Numerous on jack pine at Kenton, in the western part of the Upper Peninsula, on August 4.

A PINE SCALE (Physokermes insignicola Crawl.)

Texas. R. K. Fletcher (August 22): Loblolly pine attacked in Brazos County.

PINE NEEDLE SCALE (Chionaspis pinifoliae Fitch).

Nebraska. M. H. Swenk (August 23): Inquiry as to control sent from Scotts Bluff County, western Nebraska, on August 8.

POPLAR

COTTONWOOD BORER (Plectrodera scalator F.)

Oklahoma. N. D. Wygant (August 22): Extensive damage being done to cottonwood in the United States Forest Service plantings in western Oklahoma. Trees from one to several years old are infested. Heavily infested trees break off in the wind.

SPRUCE

SPRUCE BUD SCALE (Physokermes piceae Schr.)

Michigan. R. Hutson (August 22): Spruce bud scale received from Birmingham, southeastern Michigan, on August 7.

SPRUCE MITE (Paratetranychus uniunguis Jacobi)

Pennsylvania. H. E. Hodgkiss (August 25): Reported as causing damage in various places.

SUMAC

CATERPILLARS (Datana sp.)

Missouri. L. Haseman (August 24): Early in August complaints and specimens of caterpillars feeding on sumac were received. Field check-up at Columbia indicated wild sumac as infested by the same caterpillar. On August 24 caterpillars had just completed their feeding and were pupating.

A GALL (Pemphigus rhois Fitch)

Massachusetts. A. I. Bourne (August 24): Specimens of sumac received on August 18 from Williamstown, northwestern Berkshire County, showing the presence of this gall. Practically all insect specimens found to bear wing pads, indicating that they were nearly ready for emergence.

SYCAMORE

PLANETREE LACEBUG (Corythucha ciliata Say)

Connecticut and New York. E. P. Felt (August 23): Very prevalent in western Connecticut and in the lower part of the Hudson River Valley.

WILLOW

LEAF BEETLES (Chrysomela spp.)

Ohio. E. W. Mendenhall (August 20): Spotted willow leaf beetle (C. interrupta F.) injurious on willow stock in a nursery at Zanesville, Muskingum County.

Nebraska. M. H. Swenk (August 23): Cottonwood leaf beetle (C. scripta F.) found attacking cottonwood trees in Garden County, western Nebraska, on July 29, and in Pierce County, northeastern Nebraska, on August 1.

EUROPEAN WILLOW LEAF BEETLE (Plagiodera versicolora Laich)

New England and New York. E. P. Felt (August 23): Damage somewhat generally abundant, and here and there seriously injurious to willows in southern New England and southeastern New York.

POPLAR TENTMAKER (Ichthyura inclusa Hbn.)

Ohio. E. W. Mendenhall (August 15): Found infesting willow trees in a nursery at Columbus, doing some damage.

WILLOW-GROVE APHID (Melanoxantharium smithiae Monell)

Ohio. E. W. Mendenhall (August 19): Quite injurious and annoying on weeping willow trees at Crooksville, Perry County. (August 25): Found infesting weeping willow trees at Delaware, north-central Ohio.

I N S E C T S A F F E C T I N G G R E E N H O U S E
A N D O R N A M E N T A L P L A N T S

HAIRY CHINCH BUG (Blissus hirtus Montd.)

- Connecticut. J. P. Johnson (August 22): Infestations in lawns more prevalent this year than last. Reported as occurring in New Haven, Hamden, Shelton, West Haven, Bridgeport, Westport, and Hartford.
E. P. Felt (August 23): Causing some injury to lawns at Stamford.
- New York. N. Y. State Coll. Agr. News Letter (August 22): Chinch bugs are at the height of their infestation now in eastern New York. They have been brought out in great numbers by hot weather.
- Pennsylvania. H. E. Hodgkiss (August 25): The hairy chinch bug is causing serious damage on a number of golf courses throughout the State.
- Florida. A. N. Tissot (August 23): A chinch bug (B. insularis Barber) reported as doing quite a bit of damage in St. Augustine grass lawns at Gainesville. Also reported from Haines City.

GARDEN FLEA HOPPER (Halticus citri Ashm.)

- Indiana. J. J. Davis (August 24): Very abundant and damaging ornamental perennials and annuals in central Indiana.

A TREEHOPPER (Enchenopa binotata Say)

- Michigan. R. Hutson (August 22): Eggs on bittersweet reported from Goodrich on August 15.

WHITE PEACH SCALE (Aulacaspis pentagona Targ.)

- Virginia. H. G. Walker (August): We have continued to receive quite a number of calls for information on the control of this scale, which has been attacking a wide variety of trees and shrubs.
- South Carolina. F. Sherman and W. C. Nettles (August 22): Several specimens of this scale on mulberry from various localities.

OYSTERSHELL SCALE (Lepidosaphes ulmi L.)

- New Hampshire. J. V. Schaffner, Jr. (August 19): Heavy infestation reported on beech trees in Sullivan County.
- Indiana. J. J. Davis (August 24): Reported as killing lilac in central and northern Indiana and as attacking other shrubs and trees.

A WASP (Chlorion ichneumoneum L.)

- Indiana. J. J. Davis (August 24): Reported in a number of places as boring holes in lawns during the latter part of July and the first of August

in central Indiana. In one instance observed dragging crickets and grasshoppers into holes dug in the ground by them.

STRAWBERRY ROOT WEEVIL (Brachyrhinus ovatus L.)

Ohio. E. W. Mendenhall (August 5): Found girdling the tender shoots of the arborvitae trees in the nursery at Zanesville. (August 18): Some damage from girdling of trees in nursery at Zanesville. Strawberry plantation nearby.

Michigan. R. Hutson (August 22): Reported as entering houses at South Haven on July 24, and at Frankfort and Whitehall on July 26.

Washington. M. H. Hatch (July 30): Considerable numbers of the two species (B. ovatus and B. sulcatus F.) reported in a house at Bremerton.

AZALEA

AZALEA SCALE (Eriococcus azaleae Comst.)

Mississippi. N. D. Peets (August 24): Infestation of this scale found on August 5 on azalea plants in McComb, Pike County, south-central Mississippi.

AZALEA LACEBUG (Stephanitis pyrioides Scott)

New York. E. P. Felt (August 23): Extremely abundant and injurious to azaleas in Scarsdale.

CRAPEMYRTLE

CRAPEMYRTLE APHID (Myzocallis kahawaluokalani Kirk.)

Georgia. T. L. Bissell (August 22): Very abundant and the plants heavily laden with moldy honeydew at Griffin, northwestern Georgia. No injury to foliage observed.

DAHLIA

SUNFLOWER WEEVIL (Rhodoabaenus tredecimpunctatus Ill.)

Louisiana. C. A. Weigel (June 29): Reported as boring into the bulbs of dahlias at Pineville, where a few were found in one field. (Det. by L. L. Buchanan.)

DOGWOOD

SAWFLIES (Macremphytus spp.)

Pennsylvania. H. E. Hodgkiss (August 25): Larvae of two sawflies (M. varians Nort. and M. tarsatus Say) defoliated dogwood generally during August.

EUONYMUS

EUONYMUS SCALE (Chionaspis euonymi Comst.)

New York. R. E. Horsey (August): A serious pest in Rochester. On August 14 observed a large mass of Euonymus radicans vegetus, which had been cut out of a private yard and thrown out, almost completely covered with this scale, young leaves and branchlets as well as old stems.

Georgia. T. L. Bissell (August 24): Twigs and leaves of euonymus heavily infested with this scale at Barnesville, central Georgia.

Mississippi. C. Lyle (August 24): On August 20 this scale reported as abundant on euonymus plants at Canton in Madison County, central Mississippi. Leaves showing a heavy infestation of scale received on August 4 from Brookhaven, in Lincoln County, southwestern Mississippi.

Texas. R. K. Fletcher (August 22): Reported from Ellis and Smith Counties.

GLADIOLUS

GLADIOLUS THRIPS (Taeniothrips simplex Morison)

Ohio. E. W. Mendenhall (August 22): Generally very destructive on gladiolus plants, especially where treatments have not been given.

Indiana. J. J. Davis (August 24): Reports of serious damage received from all parts of the State.

IRIS

IRIS BORER (Macronoctua onusta Grote)

Indiana. J. J. Davis (August 24): Very common throughout the State.

Iowa. C. J. Drake (August 22): Reported as damaging iris plantings in Cedar Rapids, east-central Iowa.

IVY

MARGINED BLISTER BEETLE (Epicauta marginata F.)

North Carolina. C. S. Brimley (August 18): Our first record of this species on Hedra helix. Made at Southern Pines, central North Carolina, where it was damaging ivy severely. It is most commonly complained of on Clematis paniculata which it often completely defoliates.

JUNIPER AND CEDAR

JUNIPER WEBWORM (Dichomeris marginellus F.)

Ohio. E. W. Mendenhall (August 11): The juniper webworm is doing some injury in a nursery and cemetery south of Columbus.

JUNIPER SCALE (Diaspis carueli Targ.-Tozz.)

Pennsylvania. H. E. Hodgkiss (August 25): Juniper scale very abundant.

Michigan. R. Hutson (August 22): Young scales just establishing themselves on juniper in Highland Park, southeastern Michigan, on August 2. Winged males present.

CEDAR BARK BEETLE (Phloeosinus cristatus Lcc.)

Nebraska. M. H. Swenk (August 23): Reported as attacking cedar trees in Hamilton County, southeastern Nebraska, on August 2.

PRIVET

THRIPS (Thysanoptera)

Connecticut. E. P. Felt (August 23): Privet thrips (Dendrothrips ornatus Jabl.) causing some injury at Stamford.

Indiana. J. J. Davis (August 24): Thrips (species unknown) very abundant on privet at La Fayette and elsewhere, and appreciably damaging the foliage.

RHODODENDRON

A LACEBUG (Tingidae)

North Carolina. B. H. Wilford (August 2): Found very destructive on Rhododendron catawbiense in a commercial nursery at Pincola.

ROSE

A BEETLE (Carpophilus pallipennis Say)

Colorado. C. R. Jones (August 1): Very prevalent throughout the State in all types of blossoms, and doing considerable damage in rose gardens.

SPIREA

RED-BANDED LEAF ROLLER (Argyrotaenia velutinana Walk.)

Ohio. T. H. Parks (August 20): Found feeding on spirea plants in a nursery at Columbus, and destroying foliage. Also quite a pest of apple.

INSECTS ATTACKING MAN AND
DOMESTIC ANIMALS

MAN

MOSQUITOES (Culicidae)

Vermont. F. C. Bishopp (August 25): According to H. L. Bailey, very few mosquitoes around Lake Dunmore this summer. One of the late records for the appearance of Aedes cinereus Meig. was August 7. (Det. by A. Stone.)

Massachusetts. A. I. Bourne (August 24): Veritable scourge of mosquitoes brought about by the unusually heavy and frequent rains in July. Complaints of their abundance from all parts of the State.

Connecticut. A. W. Morrill, Jr. (August 1): Mosquitoes, apparently Culex spp., have been extremely prevalent in the Hartford area for the last week, during an unusually hot and humid period. Following a period of extreme rains the insects appeared in swarms. They are stated to be more numerous and more persistent in entering houses than at any time within recent years. Although normally they will not attack except at dusk, they have been present at all times of the day. Screens which have been in past years quite adequate for keeping them out of the house have failed this year completely.

New Jersey, Delaware, and Maryland. G. H. Bradley, W. A. Connell, and J. A. Rowe (August): Large broods of A. sollicitans Walk. emerged following heavy rains during the middle and latter part of July and caused mosquito infestations in both inland and resort towns in southern New Jersey, Delaware, and eastern Maryland. Brood of late July particularly large and annoying during the first 2 weeks of August. In southern New Jersey, although A. sollicitans was the predominating species, considerable numbers of A. vexans Meig. were also present.

Illinois. F. C. Bishopp (August 1): Reports received of the appearance of large numbers of the shaggy-legged gallinipper (Psorophora ciliata F.) during late July. Very annoying to man in manufacturing plants near the river bottoms.

California. F. C. Bishopp (August 25): In late July 103 mosquitoes taken in 1 trap in 1 day at Fresno by P. Simmons. Mosquitoes reported as being annoying in the vicinity.

BAT BUG (Cimex pilosellus Horv.)

Delaware. E. A. Back (July 26): Found in ruffles of curtain at window, in bed close to window, and on upholstered chair in living room in home near Newark. No biting of occupants reported. (Det. by H. G. Barber.)

CHIGGER (Trombicula irritans Riley)

New Jersey. T. H. Jones (August 20): There have been a number of complaints of chiggers.

Indiana. J. J. Davis (August 24): Chiggers were very annoying throughout most sections of the State during August.

Iowa. C. J. Drake (August 22): Complaints of unusual abundance of chiggers received from Burlington, southeastern Iowa, Sioux City and River Sioux, western Iowa, and Dubuque, eastern Iowa.

EYE GNATS (Hippelates spp.)

Maryland. F. C. Bishopp (August 25): These gnats present in considerable numbers throughout August around dogs, and occasionally annoying to man.

TROPICAL RAT MITE (Liponyssus bacoti Hirst)

South Carolina. W. C. Nettles (August 22): One case of rat mite affecting man has recently come to our notice. (Det. by F. C. Bishopp.)

SADDLE-BACK CATERPILLAR (Sibine stimulea Clem.)

Indiana. J. J. Davis (August 24): Sent in repeatedly from the southern two-thirds of Indiana, the first report being dated August 3, and reports received up to the present. In many cases reported as feeding on corn, but in most cases refer to having been bitten or stung by this caterpillar. More reports received this year than any year during the last 18.

AMERICAN DOG TICK (Dermacentor variabilis Say)

Maryland, Virginia, and District of Columbia. F. C. Bishopp (August 24): This tick quite scarce in the District and nearby Maryland, as is usual at this date. The third death from Rocky Mountain spotted fever in Montgomery County today. (August 29): A recent report by Dr. C. H. Halliday, of the Maryland Department of Health, states that there have been 33 cases of Rocky Mountain spotted fever with 11 deaths reported so far this year in Maryland. This is a higher mortality than last year, when 7 deaths and 35 cases were reported. Montgomery, Anne Arundel, Baltimore, and Prince Georges Counties showed the largest number of cases. The number of cases of spotted fever in Virginia appears to be about normal, though complete reports are not available. Seventeen cases were reported the first 2 weeks of August.

J. A. Hyslop (August 28): A fully engorged tick was taken from a dog at Silver Spring, Md., today. A tick only slightly attached to a person on August 27 was reported from near Rockville, Md.

Virginia. L. D. Anderson and H. G. Walker (August): Ticks have been reported as very abundant in a dog kennel at Norfolk.

Georgia. A. L. Brody (August 20): Very few specimens of dog tick seen on sheep and cattle during the last month. No dogs examined.

ORIENTAL RAT FLEA (Xenopsylla cheopis Rothsch.)

Ohio. F. C. Bishopp (August 25): "A regular plague of these fleas" biting and otherwise causing considerable discomfort to workers in the offices of a manufacturing plant at Youngstown, was reported by E. A. Berglund. Rats are abundant in the vicinity. (Det. by H. E. Ewing.)

CATTLE

SCREWORM (Cochliomyia americana C. & P.)

South Carolina. F. C. Bishopp (August 25): Specimens from a hog at Clemson College on August 15. E. G. Godboy writes that this was the first case of screwworms at the College and the first heard of in that section of the State. Since then one sheep and one cow infested. No other definite records received from South Carolina ~~this~~ year.

J. G. Watts (August 10-25): One case reported as resulting from a wound on a cow at Fairfax.

Georgia. A. L. Brody (August 20): True screwworm only slightly active in the vicinity of Valdosta during the last month. Heavy infestations reported from Quitman and from Mabila. Sixty-one cases collected in the vicinity of Valdosta from the week beginning on July 16 through August 20, found on both natural and artificial wounds.

Florida. S. E. Shields (August 22): Complaints of screwworm frequent during the last month. Average number of treatments per day, for the last month, five or six, and many severe infestations in mouths of livestock. Numerous deaths from screwworm.

A. L. Brody (August 20): At least 50 cases of screwworm reported in 535 head of cattle in Hendry County. Greater number of cases in the cars, which were heavily infested with the Gulf coast tick.

F. S. Chamberlin (August 12): A moderate infestation of screwworms in livestock reported in the Gadsden County area.

Alabama. J. M. Robinson (August 1): True screwworm attacking cattle at Comer, southeastern Alabama.

Oklahoma. F. A. Fenton (August 20): True screwworms at Bartlesville, Washington County.

Texas. R. Melvin (August): Following the heavy rains in Menard and adjoining counties, conditions apparently very favorable for the propagation of the screwworm flies, C. americana and C. macellaria F. These species very abundant in the vicinity of Menard.

STABLEFLY (Stomoxys calcitrans L.)

Maryland and District of Columbia. F. C. Bishopp (August 24): Unusually abundant and annoying to man and animals in the District of Columbia and nearby Maryland. People complain of being bitten, horses are much worried, and in many cases the ears of dogs are raw from the attack.

HORN FLY (Haematobia irritans L.)

Georgia. A. L. Brody (August 20): Not so numerous as during June and July. Flies average about 100 per animal.

Florida. A. L. Brody (August 20): Present in immense numbers at Brooksville on August 9. Flies covered some of the animals like a blanket. Many animals showed considerable injury on the underparts of the body. Very few horn flies observed in Hendry County, 15 miles south of Immokalee.

GULF COAST TICK (Amblyomma maculatum Koch)

Georgia. A. L. Brody (August 20): As noted at the experimental farm on check animals, in the vicinity of Valdosta, a slight decrease found in the number of ticks of this species during the last month.

Florida. A. L. Brody (August 20): At least 85 percent of a herd of 535 cattle reported as infested with mild to heavy infestations. Cattle pastured in Hendry County and examined about 15 miles south of Immokalee. Gulf coast tick also reported as appearing in Highlands County but not doing great damage.

Mississippi. C. Lyle (August 24): Ticks taken from a cow at Kreole, Jackson County, southeastern Mississippi, and from cows and sheep at Lucedale, George County, just north of Jackson County.

HORSE

THROAT BOTFLY (Gastrophilus nasalis L.)

Iowa. R. W. Wells (August 23): After a lapse of activity at Ames during the last two weeks of July, this pest resumed activity about August 10, and by August 19 was more active than during the early part of the summer, judging by the number of eggs obtained on egg traps exposed on horses.

DOG

BROWN DOG TICK (Rhipicephalus sanguineus Latr.)

Maine. F. C. Bishopp (August 25): Specimen from Orono, furnishing the first record for Maine and the second for New England.

Georgia. A. L. Brody (August 20): An exceedingly heavy infestation of this tick found on a dog at Valdosta, July 28.

GOAT

SHEEP BOTFLY (Oestrus ovis L.)

Georgia. A. L. Brody (August 20): During the last month 23 goat heads examined, of which 15 had nose bots in some external head cavity. Most of the larvae found in first stage and half-grown second stage. A few found on August 18 were full-grown third-stage larvae.

HOUSEHOLD AND STORED-PRODUCTS INSECTS

ANTS (Formicidae)

Pennsylvania. Mrs. C. Mullery (August 16): Ants (Monomorium pharaonis L.) found infesting a house in Philadelphia. (Det. by R. A. Cushman.)

District of Columbia. E. A. Back (August 15): Ants (Camponotus herculeanus pennsylvanicus Deg.) collected in the northwestern section of the city of Washington. (Det. by R. A. Cushman.)

Mississippi. C. Lyle (August 24): Specimens of M. pharaonis were recently received from correspondents at Columbus in Lowndes County and West Point in Clay County with the report that they were causing annoyance in houses. Both locations are in east-central Mississippi. Inspector J. Milton reported on August 20 that he found fire ants (Solenopsis xyloni F.) causing serious damage to dahlia plants in Jackson, Hinds County. Specimens of this species have also been received from correspondents at Tupelo in Lee County, northeastern Mississippi, and Brookhaven in Lincoln County, with reports that they were abundant in houses, yards, and gardens. Lincoln and Hinds Counties are in the southwestern part of the State. An ant (Solenopsis molesta Say) was found in a kitchen in Starkville, Oktibbeha County, east-central Mississippi.

Ohio. E. A. Back (July 8): Ants (Tetramorium caespitum L.), winged forms, received from Cincinnati where they were infesting basement of dwelling. (Det. by M. R. Smith.)

Oregon. S. C. Jones (August 16): Ants (Pogonomyrmex occidentalis Cress.) sent in for identification with the report that they were doing serious injury to peach trees near Halfway, Baker County, northeastern Oregon. (Det. by R. A. Cushman.)

A WASP (Polistes fuscatus variatus Cress.)

Nobrasaka. M. H. Swenk (August 23): Reported present in Knox County on August 8 and 15 in such numbers at and over a stock watering tank that

neither people nor livestock could come near the tank without getting stung. Over 300 wasps killed in one day. Similar complaint from Douglas County on August 12 and one from Gage County on August 14.

A WASP (Trypoxylon clavatum Say)

Maryland. F. C. Bishopp (August 1): Two specimens sent in on July 29, collected at Silver Spring from holes in clapboards in house. (Det. by G. A. Sandhouse.)

BROWN-BANDED COCKROACH (Supella supellectilium Serv.)

Ohio. M. W. Smith (August 6): Reported from Columbus, in a private home in Bexley, a suburb. Several specimens of each sex collected. This is the first infestation in this immediate vicinity that I know of.

HOUSE CRICKET (Gryllus domesticus L.)

Connecticut. E. A. Back (July 28): Specimens received from houses in Waterbury, where they were reported to be abundant and destroying clothing.

Pennsylvania. E. A. Back (July): Specimens received from owner of house who claims that they emerged at night on all floors, including basement and attic, and that they were damaging clothing. Killed as many as 50 in one evening.

Ohio. T. H. Parks (August 20): Specimens from Hamilton and Portsmouth. Developed in waste material of city dumps and have spread to nearby homes.

F. C. Bishopp (August 5): Troublesome household pest near a dump in Dayton.

Indiana. J. J. Davis (August 24): Reported as annoying in homes in several points in southern and central Indiana.

EUROPEAN EARWIG (Forficula auricularia L.)

Rhode Island. J. V. Schaffner, Jr. (August 1): Abundant in some localities in the vicinity of Newport during July.

Massachusetts. J. V. Schaffner, Jr. (August 1): Abundant in some localities in the vicinity of Taunton during July.

New York. E. A. Back (July 23-August 4): Troublesome in homes and gardens in Rochester. (Det. by A. B. Gurney.)

RING-LEGGED EARWIG (Euborellia annulipes Lucas)

Mississippi. C. Lyle (August 24): Hundreds of earwigs were observed on August 16 around a silage cutter on a farm in Jackson County. Apparently brought in from the fields on green corn and soybeans.

BARKLICE (Psocidae)

New Hampshire. J. G. Conklin (August 29): Psocids (Corastipsocus venosus Burn.) appeared in unprecedented numbers in all parts of the State.

Connecticut. E. A. Back (July 18): Psocids (Psocus sp.) in numbers in winged form at Money Island, Stony Creek, in unfinished attic of shore cottage, recently shingled, shaded by overhanging trees. (Det. by A. B. Gurney.)

Colorado. E. A. Back (August 1): Psocids overrunning damp basement library in a private home in Denver. House 2 $\frac{1}{2}$ years old with bookcases adjoining walls. Psocids appeared soon after books were placed in the basement. House fumigated three times, and 2 days after last fumigation, July 29, the psocids were in evidence, apparently coming in from outside via open windows, as most abundant nearest to windows.

SPRINGTAILS (Sira spp.)

New York and Pennsylvania. E. A. Back (July 19): Springtails, probably Sira buski Lubbock, numerous about window sills and in an apartment in Upper Manhattan, New York City, N. Y. **Springtails, Sira platani** Lubbock, collected about windows of house in Philadelphia, Pa. (Det. by C. F. W. Muesebeck.)

BEETLES (Coleoptera)

United States. E. A. Back (July and August): Odoriferous beetle (Nomius pygmaeus Dej.) invaded houses and hotels in Portland, Oreg., in numbers sufficient to cause newspaper comment on July 23. Appearance in houses stated to have followed a rather dry summer and correspondent refers to similar appearance which came to his attention 34 years ago when the insect was identified by Dr. L. O. Howard. Specimens of a dermestid (Thylodrias contractus Mots.) troublesome in home in Chicago, Ill., July 10. Hide beetle (Dermestes vulpinus F.) abundant in general market store in Washington, D. C., on August 9, developing upon meat scraps allowed to collect in sawdust beneath a wooden, slatted platform over cement floor. Mature larvae migrating about store, burrowing into cartons of rice, cakes of soap, and other commodities, and honeycombing shelving and supports of meat blocks. Furniture carpet beetle (Anthrenus vorax Wtrh.) from Belgrade, Yugoslavia, July 21, where they were damaging woolen clothing. Specimens alive when examined in Washington, D. C. On August 5 same species was found abundant in all stages in an upholstered piece of furniture in a house, Washington, D. C. Coninomus constrictus Gyll. is abundant in adult form in a newly constructed apartment building, July 13, in New York City. The same species found abundant on July 25 in a house in Missouri built in 1936. Beetles first noticed about 14 months ago. House fumigated in August 1937 with apparently satisfactory results. Beetles returned in force in July 1938 and continually becoming more numerous. Numerous specimens of Mycetophagidae (Typhaea stercorea L.) received from Indianapolis, Ind., July 6, where they were found in a house.

Georgia. O. I. Snapp (August 11): The cadelle (Tenebrioides mauritanicus L.) has damaged wheat stored in a warehouse at Fort Valley, central Georgia.

Michigan. J. J. Davis (August 1): Beetles (Leperisinus aculeatus Say) originally from Detroit, sent in by a Mr. Stover. Reported that they were abundant in the basement of a home. (Det. by M. W. Blackman who states that they nearly certainly emerged from ash wood stored in basement.)

Illinois. T. E. Snyder (August 2): A cossonid (Hexarthrum ulkei Horn) found damaging the woodwork of buildings in Chicago. (Det. by L. L. Buchanan.)

Texas. C. Eagleson (July 19): Bostrichid (Schistoceros hamatus F.) adults reared at Dallas from larvae burrowing in cedar cigar box and, incidentally, causing injury to cigars packed within box. (Det. by W. S. Fisher.)

Washington and Oregon. H. H. Stage (July 29): Several inquiries have been made regarding Nomius pygmaeus Dej., the malodor~~ous~~ ground beetle, within the last 2 weeks. Has been reported in gardens, dwellings, and apartments in Shelton and La Grande, Wash., and Portland, Oreg. Seems to be attracted to lights during evening. (Det. by R. L. Furness.)

California. P. Simmons (July 20): The infestation of a house at Fresno by Oryzaephilus surinamensis L., the saw-toothed grain beetle, crawling from raisin stemmer trash was reported today by telephone. The trash, to be used as fertilizer, has been on the premises of a neighbor for about a week. A similar report was investigated in 1937.

BOOKLOUSE (Troctes divinatorius Mull.)

Maryland. F. C. Bishopp and E. C. Cushing (August 4): Collected on books, August 3, at Silver Spring. (Det. by A. B. Gurnoy.)

SOWBUGS (Crustacea)

Ohio. F. C. Bishopp (August 5): Sowbugs (Porcellio laevis Latr., Porcellionides pruinosus Brdt., and Armadillidium vulgare Latr.) reported from Dayton as everywhere by the millions in the houses, especially in the basements. The walls are actually covered thick with them. They are 3 or 4 inches deep in the furnace pipes, and houses smell like dead animals. Area most affected near a dump. Reported by R. K. Barnett. (Det. by J. O. Maloney.)

